

THE MINING CONGRESS JOURNAL

OCTOBER, 1918

VOL. IV

SAFETY-EFFICIENCY-CONSERVATION

No. 10



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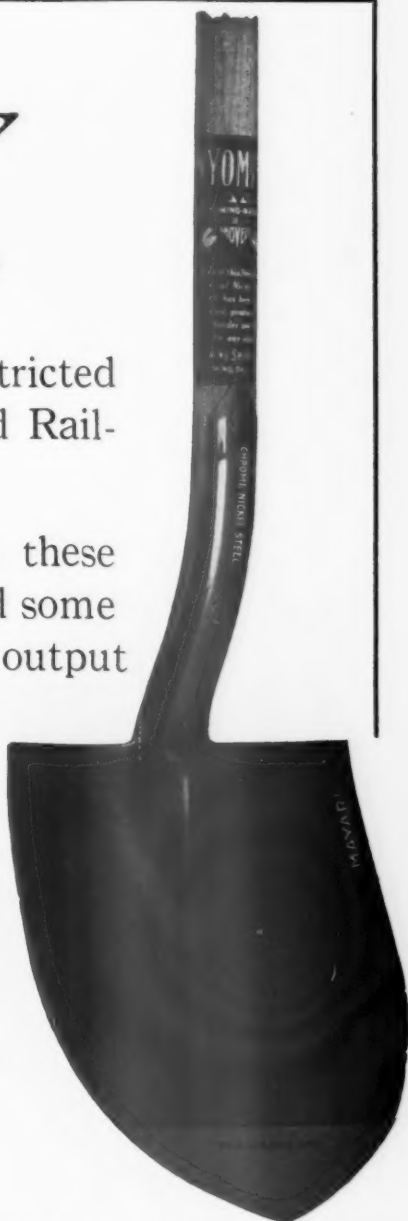
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THE MINING CONGRESS JOURNAL

OCTOBER

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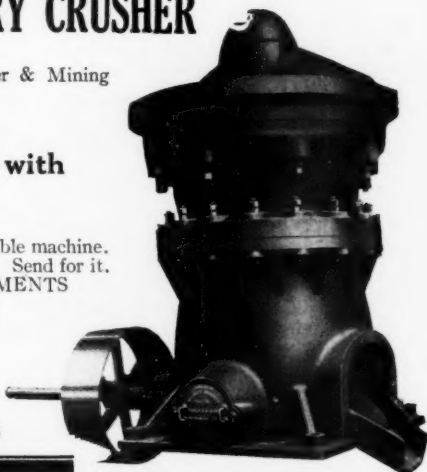
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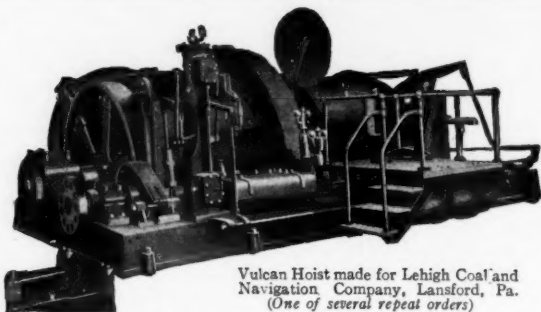
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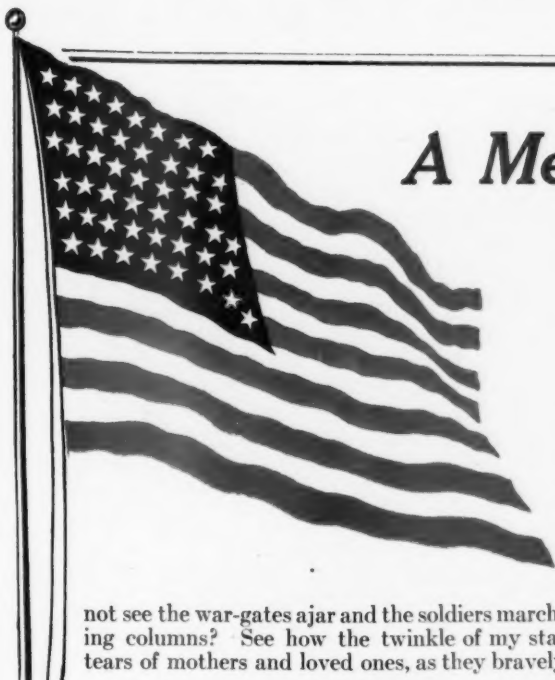
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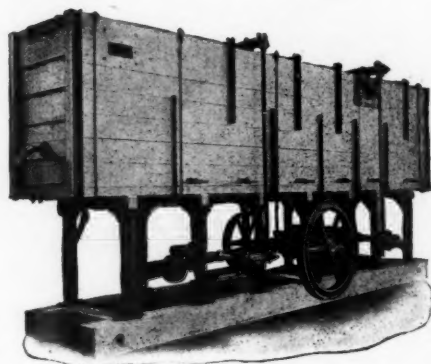
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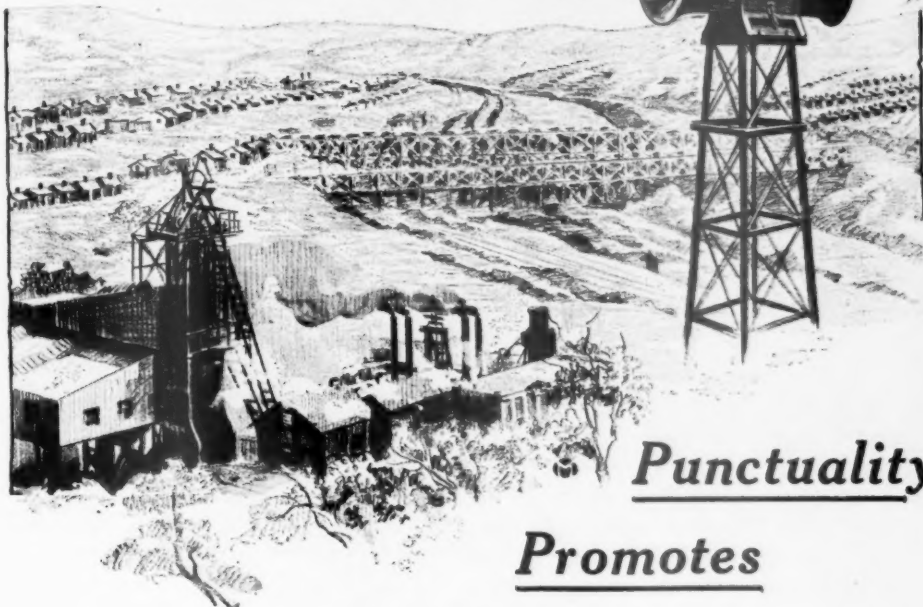
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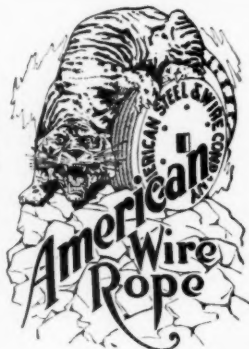
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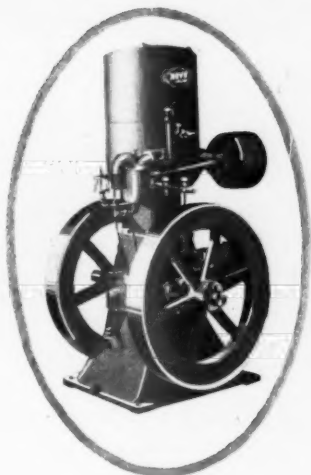


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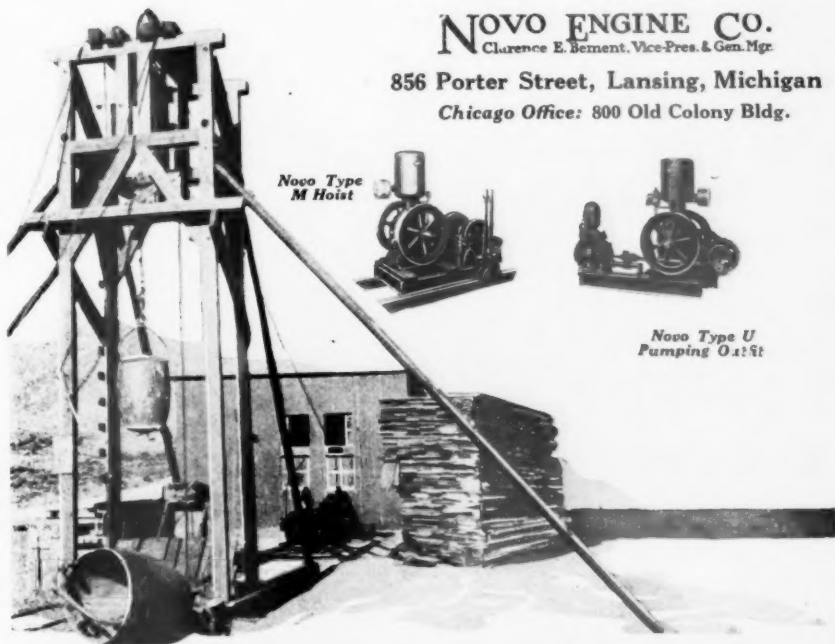
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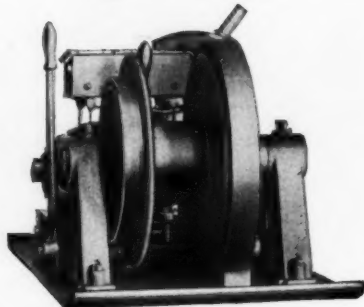


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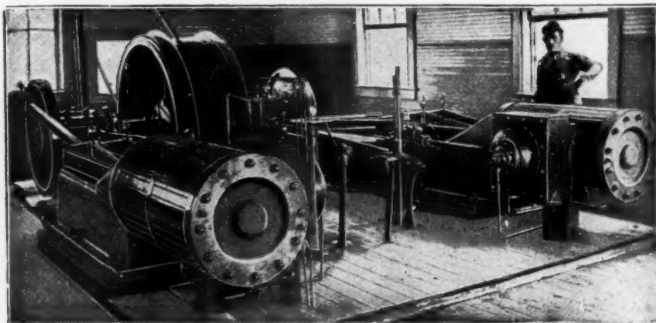
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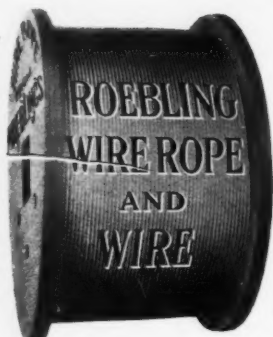
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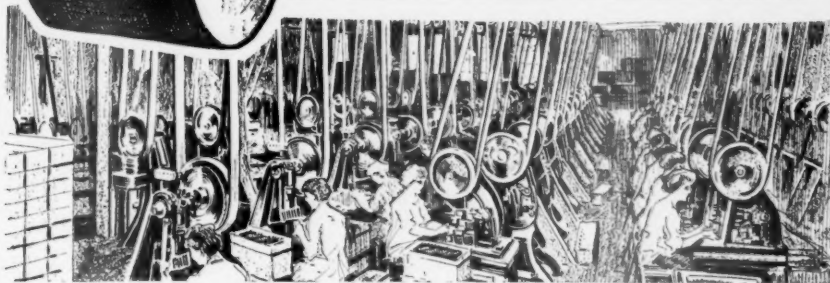
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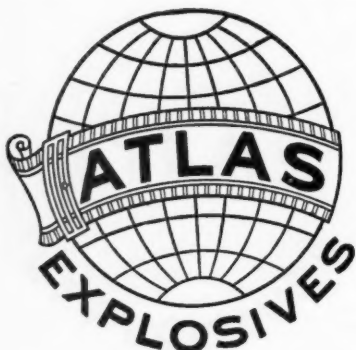
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The undeveloped resources to which I particularly refer are those with which I am most familiar through the activities of the Department of the Interior—metals and minerals which we require in large quantities, which exist in large quantities in this country, and which, in spite of this, are largely imported from abroad.

What They Are

We must have chrome, manganese, and pyrite. Our chrome comes mostly from South Africa and New Caledonia; our manganese from Brazil; our pyrites from Spain. To produce some two million tons of these and other imported minerals from domestic sources will release from three to four hundred thousand tons of shipping for military use.

Where They Are

Will you save ships for the transporting and feeding of our armies by discovering and developing our own deposits of these minerals?

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Alabama	New England States	Illinois
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MANGANIFEROUS IRON ORE

Minnesota	Colorado	Nevada	New Mexico
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MANGANESE ORE

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Franklin K. Lane
Secretary of the Interior.



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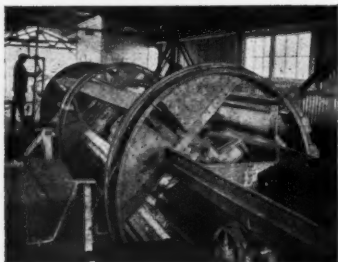
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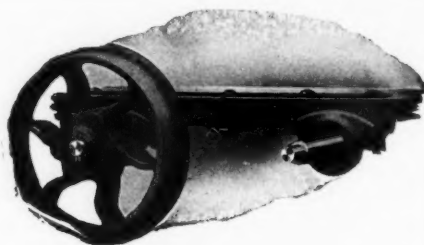
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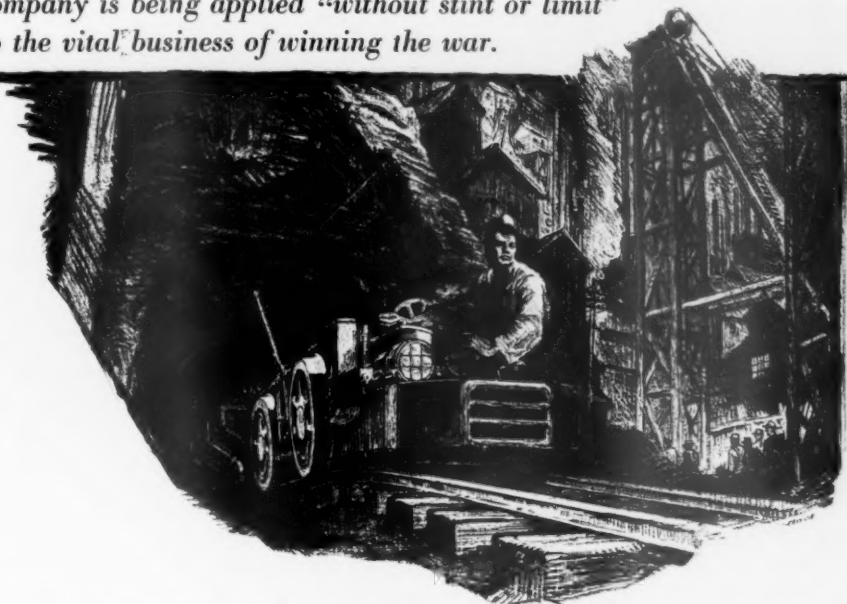
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Every electrical engineering and manufacturing facility of this company is being applied "without stint or limit" to the vital business of winning the war.



"Give us coal!" And Mule Power gives way to Electric Power

The arms of victory are forged in the nation's industrial plants. The bridge to France is the line of ships that stretches across the Atlantic. These must have sufficient coal.

Our coal mining industry made a world's record last year, despite many handicaps. In the anthracite mines alone, the labor shortage was 16 per cent, and the Government drafted many of the mules for the army's needs. Yet production increased 14 per cent. over the previous year.



Look for this—
the mark of leadership in
electrical development and
manufacture

How was it done? By better methods. By electrification. The electric mine locomotive, operated by one man, hauls a half dozen or more cars. Electric hoisting makes deep mining possible. Electrically operated ventilating fans safeguard the health of those toiling beneath ground. Electric coal cutters and drills save time and labor.

The cutting of timber for entrance ways, shoring and pillaring is speeded up by electric power. Additional motor-driven pumps are used to keep new and old workings dry, so that work proceeds without interruption.

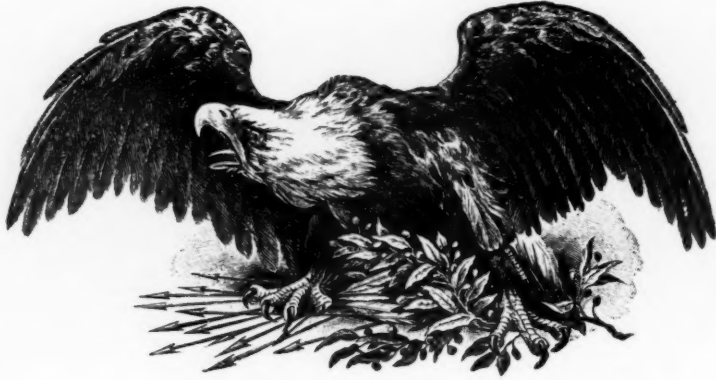
Many coal operators looked to the General Electric Company for this assistance. G-E Mining Specialists responded by giving their attention to the problems confronting each mine and the great G-E manufacturing departments did their part by making prompt deliveries.

This year, the demands upon the mines and all industry are greater, and the labor supply scarcer, than ever before. The General Electric Company pledges its entire engineering and manufacturing facilities to every industry and individual manufacturer or operator engaged in essential war work.

 **G-E motors**
From the Mightiest to the Tiniest 

GENERAL ELECTRIC COMPANY

THE FIGHTING EAGLE OF AMERICA.



THE FIGHTING ORGANIZATION OF
THE MINING INDUSTRY

THE
AMERICAN MINING CONGRESS

Home Service Sections of the American Red Cross are organized with just one purpose---to see that all families of Soldiers and Sailors are Maintained in Comfort and Peace of Mind While the Men are in Service



Any soldier or sailor who knows or fears that his family is in trouble should appeal at once to Home Service. He can go to the Home Service man attached to his division here or abroad, or he can write to his family to take their troubles to the Red Cross Home Service Section in their home town. Men in service know they will be taken care of if they are wounded or sick; they should know also that the Home Service workers of the Red Cross are willing to relieve them of worry concerning their families so far as that is possible. Relations between Home Service workers and families are as confidential as those between doctors and their patients. Home Service means sympathy, advice, expert information about laws and regulations, medical care, spiritual comfort and everything which can be given by real friends to compensate the family for the absence of the man in service.



Officers of the Army and Navy, in the interest of Morale are urged to see that every man understands Red Cross Home Service and informs his family how to avail itself of this service.

AMERICAN RED CROSS

Department of Civilian Relief, Washington, D. C.

S-A

SAFETY ALWAYS

BECAUSE we believe in the fundamental principle of Safety First, all "S-A" equipment is designed to be as near accident-proof as it can be made. That means not only Safety First, but Safety Always—when "S-A" equipment is used.

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THE MINING CONGRESS JOURNAL

Official Organ of the American Mining Congress

IMMEDIATE AID NECESSARY

Operators of low grade gold mines are not greatly concerned with the War Revenue Taxation Bill. Their concern is of means by which their operations can be brought into the class of excess profits earners. Many people have bewailed the fact that gold mines have passed into private ownership. The ancient rule that all precious metals belonged to the Crown embodies the principle which this school of thought has approved. If these conditions now prevailed can there be any doubt that the Government should push gold production to the limit? And yet by this course newly produced gold would undoubtedly cost double its coinage value. We submit that even that extraordinary cost had better be paid by the Government as applied to the cost of 5,000,000 ounces of newly produced gold representing the country's highest annual production, than to have the three thousand million dollars of our gold reserve go to a premium, which means that the purchasing value of the more than twenty thousand million dollars of credit and credit money which the gold reserves support, shall be depreciated in purchasing value.

Governor Harding, of the Federal Reserve System, gave timely warning to the recent Chicago convention of the American Bankers Association, when he said, "Yours to see that the purchasing power of this money is not impaired." These words should be taken seriously, not alone by bankers, but by the American people. And how shall it be done? We shall not undertake to answer this question, but we can point out one way by

which it cannot be done. It cannot be done if we allow the source of supply of gold, the measure of our value and the basis of our credit, to be cut off, by damming the intake and opening wide the outlet of our supply reservoir. It cannot be done by decreasing the deposits and increasing the payment from our reserve bank. It cannot be done by weakening the foundation while enormously increasing the structure of credit which that foundation supports. The American Bankers' Association at its recent convention very wisely adopted a resolution "respectfully requesting and urging upon the Government of the United States the desirability of maintaining the production of gold to at least its pre-war volume." Our effort to maintain the gold mining industry is imperative if we are to maintain or partially maintain our pre-war production. Mines are now being closed which require enormous expense and years of time to reopen. Mining timbers in an unventilated mine quickly decay and the reopening requires much of time and expense as well as great risk to the workers so employed.

The immediate and pressing problem is for prompt efforts to prevent the closing down of mines which once closed cannot be opened except at a cost so great as to make operation absolutely unprofitable, even though gold might become worth many times its coinage value.

The pressure of high prices has gradually borne down the gold mining industry to a point where immediate aid is necessary to save it from extinction.

BANKERS URGE AID

TO GOLD MINING

The annual convention of the American Bankers' Association was held in Chicago September 23 to 28, inclusive, and was attended by 4,116 delegates, representing banks from all sections of the country.

Many notable addresses were made, and much of the discussion related to the present war problems and the conditions which the after-war period will develop. Mr. Eugene Davis, of Nevada, representing the Western Gold Conference, recently held at Reno, Nevada, and the secretary of The Mining Congress were gallery spectators, greatly interested in the debate upon the gold question—the resolution offered by Mr. E. G. Crawford, of Portland, president of the Oregon Bankers' Association, and ably seconded by Noble James C. Burger, president of the Hamilton National Bank of Denver.

The following resolution was adopted:

Whereas, the gold production of the world is rapidly decreasing; and

Whereas the only form of relief that will prove effective and can be applied promptly is action by the United States Government in such form and by such methods as may be deemed fit and proper under the circumstances; and

Whereas gold is the standard of value and the basis of all credit, and it is vitally important to the financial and commercial life of the nation and of the world; now, therefore, be it

Resolved, That the American Bankers' Association, in convention assembled, respectfully request and urge upon the Government of the United States the desirability of maintaining the production of gold to at least its pre-war volume, and ask that steps be taken immediately to that end; and be it, therefore, *Resolved*, That the secretary of this association be, and he hereby is, instructed to send a copy of this resolution to the President of the United States, Secretary of the Treasury, and Secretary of the Interior, advising them of its adoption; and be it also further

Resolved, That, considering the great importance of this subject, this convention recommends to the executive council that the matter be referred to the federal legislative committee and the currency commission for an exhaustive study and such action as may be deemed necessary.

COAL ABSORBED

The Scripture has been fulfilled. The lamb and the lion have lain down together—telescoped. The coal industry and the Government have become one—by absorption.

If one is that sort of a thing which makes "political" speeches—turns phrases to catch the applause and hides ignorance behind a platitude—one would say that in these glorious times the people and the Government have become one, doing a common thing to win a common end.

But if one is a little more candid and is not seeking mere vacant popularity, one must admit that the Government has not only taken over the coal business, but it has absorbed it. The ink was on the table; the blotter took it up. Therefore, the Fuel Administration runs the mines, distributes the coal, gathers the statistics, does the thinking of the coal men about those figures, and even, by indirection, edits the coal trade papers. At least, it supplies the only available set of facts upon which the trade paper editors can formulate their opinions.

The coal industry, as such, has disappeared. In its place has come the Fuel Administration.

There is and can be no room for complaint about such a situation if the Fuel Administration can think and act for the whole coal industry. The "if" there is a big thing. It dominates the whole coal question. America needs coal. The world needs coal, and America is the only source of available supply. This means that the American coal question is, after all, the crux of many war questions. Indeed, there is nothing quite so big, unless it is the supply of iron ore.

With so many vexed questions revolving around the coal situation and with the coal problem reduced to a simple matter of producing more coal, there arises a need for intensified action by each individual in the coal trade. When you try to get that intensified action, you plunge headlong into a very human situation.

If left alone in a kitchen with food in the icebox and a stove in one corner of

the room, no man is going hungry. He will develop the ingenuity and the directness of action which will feed him. But in precisely the same situation insert the man's wife, who is, naturally and properly, the boss of the job. Then the man becomes a doddering idiot and a nuisance. He is a mere incumberer of space. He can't take care of himself. He can't even execute an order. In a few moments his wife sends him away in despair.

That is precisely the situation in coal. With the nation filled with mines, with transportation at the door, the coal man can somehow manage to satisfy the demand. But he becomes the essence of clumsiness when he is forced to obey orders—in detail. There is no need to continue the analogy. It is obvious that too much direction kills the efficiency of the man directed.

There is no more a disposition to advocate here that the Fuel Administration be dispensed with than there is an intention to advocate that the directing heads of business concerns be discharged and that every office be organized on the cooperative basis. There is every intention to say that sensible direction is always necessary.

But there is no common sense in the effort to substitute bureaucratic rules for the natural initiative of the individual. The bureaus are not big enough—mentally—to issue orders in detail. Human nature is not pliable—or servile—enough to obey those orders efficiently.

If it were only possible to strike the happy mean! But, then, we have often wished we might unscramble eggs.

THE SHORTAGE OF LABOR

To the shortage of labor may be traced the continually increasing prices of the necessities of life and the increasing burden upon laboring people everywhere, and particularly upon government and other employes, who are working for fixed salaries. We are withdrawing for war purposes approximately ten million men, or twenty-five per cent of the forty million who in this

country are engaged in gainful occupations. It would seem that patriotic impulses would lead the remaining thirty millions of people to so increase their efforts as to make up for this shortage in the productive world.

THE MINING CONGRESS JOURNAL called attention some time ago to the fact that in order to keep up production it would be necessary for the working men of this country to add twenty-five per cent to their effectiveness, that we shall import ten millions foreign workers, or that our women should be forced to go to work. It still believes that the man who refuses to increase the hours of service and bring up the standard of efficiency to the highest point during the war period and prefers to see his wife or sister engage in menial labor lacks the qualities required to make a patriotic or a good citizen. Instead, however, of the remaining workmen attempting to make up the deficiency caused by this shortage, evidence comes from every section of the country to the effect that the scarcity of labor and the ease by which men may find employment elsewhere is destroying the discipline of management and greatly reducing the efficiency of the service rendered.

As a part of the investigation of the conditions existing in the gold mining industry, reports have been received by this office from a very large number of gold mines. The large majority of these reports show an increased cost of labor of from twenty-five to thirty-five per cent and a decrease of efficiency of from thirty to fifty per cent. We quote from a letter from a western mine operator: "The constant attempt to recruit labor here and there by overbidding the present employer is, I think, a most pernicious business, which is responsible for much of our trouble. Even the scarcity of men is not so alarming as the fact that they will not buckle down to work, but prefer to wander around from place to place." A telegram from the northern iron ore producing field says: "Is the Government going to establish a wage for the miner? This should be done at an early date because of fact

that it is impossible to keep up with demands that are being made. Miners are demanding more wages as often as once a month. Operators because of the shortage of this kind of labor are bidding against each other. There is a limit to what can be paid, and it means the closing down of many mines unless there is some definite action taken to stop it. Uniform wage should be established during period of war."

From the coal mines and the oil fields comes the same story—that the workman because of the fact that there are plenty of other jobs awaiting him, not only fails to do the increased amount of work that the present war conditions require, but the work he does falls far short of its effectiveness in usual times because of the lack of discipline. THE MINING CONGRESS JOURNAL would be glad of some evidence that this condition is not true. But it recognizes the fact that human nature everywhere takes advantage when the opportunity offers. The Washington milliner selling hats for \$25 and \$30 which ordinarily sold for \$12 or \$15 explains by saying everybody seems to have plenty of money and "we can get the price." Even the colored domestic when appealed to by the mistress whom she was leaving with the question, "What am I to do?" replied: "You women will jes haf to learn to do yo' own work, 'cause all us ladies is goin' in de gov'ment." It is most unfortunate that this tendency to take advantage of the situation, which is so prevalent with all humanity, might not be set aside during the war time. Labor in the end will itself be forced to carry the burden. Luxuries and necessities of drone and worker alike must all come from the supply produced by the joint use of capital and labor, neither of which by itself can produce efficiently. The luxuries and necessities cannot be divided until after production has made them available for division. The dignity of labor can rest on no other foundation. The present shortage magnifies the importance of labor and furnishes the opportunity to demonstrate labor's patriotism.

GOLD MINING AS A BUSINESS

At present the most unremunerative business in the world is the mining of gold. For many years prior to 1915 the world production of gold had been declining because of the continually increasing cost of the labor, machinery and supplies required in its production, while the value of the product remained stationary. Gold is the standard of value. Its price and value must remain stationary else it ceases to be a standard. Incidental with these trying conditions the brains of the mining world applied themselves to the task of decreasing the cost of gold, both in devising improvements to the mechanical means employed in mining and reduction, and also in improvements of chemical and metallurgical processes employed in separating the infinitesimally minute particles of gold from the gangue material.

The greater part of the world's production of gold is from ores carrying less than \$2 per ton, *i. e.*, one part of gold to 319,999 particles of other materials. Most of this gold is found in combination with other metallic substances from which it must be liberated by some metallurgical process. The finding of the proverbial needle in a haystack is not more difficult than the recovery of gold. The perfection and application of the result of scientific investigation as applied to gold reduction caught up with production cost in 1915. The production during that year, both in the United States and the world at large, was the greatest in history. Then prices took an upward turn and gold production diminished in corresponding ratio. These conditions apply only to low grade ore bodies. The few high grade producers were able to continue notwithstanding the increased costs of operation. In 1917 a new condition applied itself to the high grade and highly profitable gold mines. The war excess profits tax called for from 20 per cent to 60 per cent of the net operating revenue. This was an entirely proper tax, if proper allowance is made for depletion and depreciation; but without proper allowances for the exhaustion of the ore body, which repre-

sents years of hazardous development work, the extraordinary depletion of the plant because of the short life of the enterprise, the plant being practically worthless when the ore body is exhausted—the law becomes confiscatory. To illustrate: a promising prospect was taken under an option of \$35,000 and \$125,000 was spent in development resulting in the opening of a measured ore body with value estimated at \$3,600,000. The probability that this ore body would extend beyond explored areas gave the stock of the company a market value of \$4,800,000, at which price a large part of the stock was sold. The net operating revenue of this mine in the year 1917 exceeded a million dollars. Much of this was distributed in dividends or expended in the development of other properties prior to the passage of the revenue law of 1917. This property had no pre-war earnings, therefore was entitled to a deduction of 8 per cent on its invested capital; but what was its invested capital? Was it the \$35,000 for which the original owners bought the undeveloped property or \$4,800,000, at which the later stockholders purchased? Is depreciation to be allowed which will amortize the cost of plant in three or four years, the probable life of a high grade ore body, or upon the assumption that, like a manufacturing enterprise, the business will outlast the plant? Shall its depletion be allowed on the basis of the actually invested capital of the present stockholders or upon the theory that the option price, paid for the undeveloped prospect, measures the invested capital? Upon the determination of these questions depends the continued operation of high grade gold mines. These answers may be so given as to result in confiscation, in which case continuous operation cannot be expected. It is up to the Treasury Department.

INDIVIDUALISM VS. UNIONISM

The development of the mining industry of the United States has in past years depended very largely upon the business sagacity and fighting qualities of the individual operator.

Districts located in the same state have had to meet both development and labor problems from such different angles that it is not at all surprising that organizations of employers have not always "pulled together" for a common result. Organizations of employers in one state have often failed to consider the intra-state problems of their neighbors as of interest to themselves, and naturally have failed to see the inter-dependence of states, excepting as war problems have forced price-fixing problems upon them in these late days.

In fact, there has grown up among the men who have placed their time and fortunes in the mining industry a feeling that each man, or group of men, should consider personal interests first and common interests afterwards.

This individualism has been, and is, the common danger of the mining industry.

"Until mining operators cease to insist upon individualism, it will be impossible to put an end to conflicts between employer and employed," said an official of the American Federation of Labor to the writer recently. THE MINING CONGRESS JOURNAL would carry the speaker's theory still further. Until individualism is less the dominating factor in considering mining problems, the mining industry will continue to get the minimum protection under existing and threatened laws, in taxation, in marketing problems, in labor contests, and, more important than all, in the economic results from the readjustments which *must surely soon come in America* as the aftermath of the war.

Labor makes no such error as is charged against the mining cult as a whole. It has made its mistakes. In many instances it has failed to consider that there are two sides to a controversy. It is "riding in" on the rebound of the pendulum which came from contact with certain admittedly unjust conditions where nothing but a fight for their rights could have brought about reforms. It has begun to assume that only unionism is right; and therein lies not only a danger to unionism but to the country at

large. But the one big fact stands prominently out for consideration—labor unionizes, and unionism is already recognized as an element in the federal administration. In the working out of all war policies where labor, or prices, or production are concerned, the American Federation of Labor, through the astute political scheming of its president, has its hand upon the whole situation.

The United States Department of Labor is publicly admitted to be the official representative of union labor in the federal scheme of administration. The Federal War Labor Policies Board is headed by Felix Frankfurter, formerly counselor for Secretary Wilson. The Mining Division of the Labor Department is under the skillful hand of James Lord as chairman, and Mr. Lord is well known as a federation man. Its secretary is William Diamond.

And over all there is Mr. Gompers, with a cleverly selected group of tried and true laborites.

To state these facts is to extend a tribute to the sagacity of the men who champion the cause of unionism. The interests of labor as represented in unionized labor are in good hands, and more, these interests are *centralized*, and there can be no crossing of wires or failure of maximum results. These men believe and practice their life-long preaching, "In union there is strength."

Labor is well entrenched and in position for either defensive or offensive work. That does not prove that labor is always right, but the results obtained prove the *wisdom of concentration* in organization.

THE NEW REVENUE BILL

The new revenue bill (H. R. 12863) has been passed by the House of Representatives, and is now before the Senate Finance Committee for consideration.

The Secretary of the Mining Congress presented to the committee, a number of suggested amendments, which appear on another page of this issue. At a later date a general conference was held in the office of The Mining Congress in

Washington between representatives of The American Mining Congress and the National Petroleum War Service Committee, which conference agreed upon changes in the recommendations therebefore made. These changes were prepared by a sub-committee, consisting of Mr. Edward L. Doheny, Judge J. Harry Covington, Mr. George E. Holmes, Mr. John J. Fitzgerald, Mr. Paul Armitage, Mr. John C. Howard, and Judge A. Scott Thompson, which recommendations have been presented to the Senate Committee on Finance by this committee, as the joint recommendation of these two organizations.

These recommendations represent the finished efforts of the joint committee representing both organizations, with full knowledge of the general needs of the mining industry, the temper of the Congress of the United States, and the present status of the legislation involved.

The suggested amendments are as follows:

INCOME TAX

I

SALES OF MINING, OIL OR GAS PROPERTIES

We suggest amendment of Section 211 by adding after line 15 the following:

"Provided, in the case of a bona fide sale of mines, oil or gas wells, or any interest therein by the individual owner thereof, the surtax shall be computed under this section but shall not exceed 20 per cent of the selling price."

Unless this is adopted, development of new oil, gas and mineral bodies will be held back because the prospector who has made the find is not financially able to develop it further, and he refuses to sell because of the heavy war taxes and production is lessened.

We suggest additional Section 337 on page 68 after line 7 as follows:

"Sec. 337. In the case of a bona fide sale of mines, oil or gas wells, or any interest therein, by a corporation owner thereof, the tax computed under this title shall not exceed 20 per cent of the selling price."

II

DEPLETION AND DEPRECIATION AS APPLIED TO MINES, OIL AND GAS WELLS.

Deposits must be continually renewed or discovered. This must be done at unknown costs varying over a wide range from ex-

tremely low figures to amounts far in excess of the market value of the production when found. The producer now selling a product which has been discovered at only a fraction of the average cost should be allowed some insurance against the time when the discovery cost will be far more than it can be sold for and resulting in net loss.

We suggest an amendment to meet this condition, to wit:

Amend paragraph 10 of Section 214 to read as follows:

(Amendment in italics.)

FOR INDIVIDUAL

(10) "In the case of mines, oil and gas wells, (a) a reasonable allowance for depletion; and (b) a reasonable allowance to replace the ore, oil or gas withdrawn during the year, equal to the estimated cost of replacements of a like quantity in the ground, to be fixed by the Commissioner upon the basis of the average cost of such replacement in each general district, the allowance under (b) to be reduced by any allowance under (a) for each taxable year, and, *Provided, that any amount of the aggregate allowance under (b) when used for any purpose other than prospecting, developing or acquiring additional deposits shall be included in net income; (c) a reasonable allowance for depreciation of improvements; such reasonable allowance in all the above cases to be made according to the peculiar conditions in each case, and under rules and regulations to be prescribed by the Commissioner with the approval of the Secretary. In the case of leases the deductions allowed by this paragraph shall be equitably apportioned between the lessor and lessee. In the case of a non-resident alien, individual deductions under this paragraph shall be allowed only as to property within the United States;*"

Also amend paragraph (9) of Section 234 to read as follows:

(Amendment in italics.)

SAME FOR CORPORATIONS

(9) "In the case of mines, oil and gas wells, (a) a reasonable allowance for depletion; and (b) a reasonable allowance to replace the ore, oil or gas withdrawn during the year, equal to the estimated cost of replacement of a like quantity in the ground, to be fixed by the Commissioner upon the basis of the average cost of such replacement in each general district, the allowance under (b) to be reduced by any allowance under (a) for each taxable year, and, *Provided, that any amount of the aggregate allowance under (b) when used for any purpose other than prospecting, developing or acquiring additional deposits shall be included in net in-*

come; (c) a reasonable allowance for depreciation of improvements; such reasonable allowance in all the above cases to be made according to the peculiar conditions in each case, and under rules and regulations to be prescribed by the Commissioner with the approval of the Secretary. In the case of leases the deductions allowed by this paragraph shall be equitably apportioned between the lessor and the lessee. In the case of a foreign corporation the deductions under this paragraph shall be allowed only as to property within the United States."

III

THE 6 PER CENT DIFFERENTIAL TAX ON UNDISTRIBUTED PROFITS WHERE REQUIRED IN THE BUSINESS SHOULD BE ELIMINATED. (See Sec. 230.)

Business should not be penalized for retaining the necessary amount for its use in the enterprise.

We suggest the revision of the existing law as follows:

Amend Subdivision (a) of Section 230 by adding after the figures "1918" in line 8 on page 32 the following words:

"plus (4) the amount actually invested and employed in the business or which is retained for employment in the reasonable requirements of the business."

Amend Subdivision (b) of Section 230 by adding after the figures "1918" in line 24 on page 32 the same words as quoted above.

EXCESS PROFIT TAX AND WAR PROFIT TAX

IV

THE PROPOSED LAW SHOULD ALLOW CORPORATIONS WITH PRE-WAR EARNINGS THE SAME PERCENTAGE CREDIT ON ADDED CAPITAL AS ITS PRE-WAR EARNINGS WERE OF THE THEN CAPITAL.

This will equalize the tax between old corporations having large capital and a large percentage of earnings during the pre-war period and corporations with small capital during same period but having added thereto since the war.

We suggest the following:

Amend (2) of Subdivision (a) of Section 312 to read as follows:

"An amount which bears the same ratio to the invested capital for the taxable year as the average net income of the pre-war period bears to the average invested capital for the pre-war period; but if the tax is computed for a period of less than twelve months such amount shall be re-

duced to the same proportion thereof as the number of months in the period is of twelve months."

V

THE PROPOSED LAW FAILS TO ALLOW TO NEW CORPORATIONS A CREDIT OF THE NORMAL PROFITS LIMITING IT TO 10 PER CENT ON CAPITAL INVESTED. THIS DISCRIMINATES AGAINST ALL CORPORATIONS WITH NO PRE-WAR RECORD AND TAKES 80 PER CENT OF THEIR PROFITS OVER 10 PER CENT. AN EXAMPLE WILL MAKE THIS CLEAR.

Two corporations with invested capital of \$1,000,000.00 each (1) with pre-war earnings of 15 per cent and a taxable income of 15 per cent, (2) the other without a pre-war record but with similar income.

The tax computed as follows: (Specific exemption omitted for simplicity).

(1) Old company would not be taxed under the war profit method and the tax under excess profits method would be as follows:

Net income.....	\$150,000.00
Credit 8 per cent of capital.....	80,000.00

Income taxable at rate of 35 per cent.....	\$70,000.00
Tax	24,500.00

(2) New company will be taxed under war profit method as producing a higher tax:

Net earnings.....	\$150,000.00
Credit of 10 per cent of capital.....	100,000.00

Taxable at 80 per cent.....	\$50,000.00
Tax	40,000.00

There is no reason for such discrimination. Neither makes a war profit.

We propose the following amendment, which will place new corporations on an equal basis:

Amend Section 312, Subdivision (b) to read as follows:

"(b) If the corporation were not in existence during the whole of any one calendar year during the pre-war period, or if it had no net income for the pre-war period, then the war-profits credit shall be the sum of:

(1) A specific exemption of \$3,000.00; and

(2) An amount which bears the same ratio to the net income of the corporation for the taxable year as the war-profits credit under paragraph (2) of Subdivision (a) of representative corporations for the taxable year, engaged in a like or similar trade or business and having net income in the pre-war years, bears to the net income of such representative corporations; but in no event to be less than 10 per cent of the invested capital of the corporation for the taxable year."

VI

THE LIMITATION OF THE INVESTED CAPITAL TO THE PAR VALUE OF THE STOCK SHOULD BE STRICKEN OUT.

To effect this we suggest the following amendment:

Section 326: Amend Subdivision (a) by substituting, in lieu of Subdivisions (1) and (2), the following:

(1) Actual cash paid in;

(2) Actual cash value of tangible property, other than cash, paid in, at the time of such payment, but if paid in prior to January 1, 1914, the value as of such date.

This amendment also restores the provision in the present law valuing properties of older companies as of January 1, 1914.

The invested capital of all of the older corporations have been already arrived at by the Treasury Department. The bill as proposed will require a *reappraisal* and, in many cases, at a remote date, when data is unavailable.

This amendment gives credit for all cash or tangible property paid in for stock or otherwise.

VII

THE TAX WHEN ASSESSED AND PAID IN GOOD FAITH SHOULD BE FINAL.

We propose an amendment to Section 1201 that secures this.

Amend Section 1201 to read as follows:

(Amendment suggested in italics.)

"That the Secretary or the Commissioner may and on the request of any taxpayer directly interested shall submit to the Board any question relating to the interpretation or administration of the Internal Revenue Laws, or involving the assessment or determination of any tax thereunder, and the Board shall report its findings and recommendations to the Secretary or the Commissioner, as the case may be, and such findings on any question involving the tax shall when approved by the Commissioner be final unless set aside by a court of competent jurisdiction."

VIII

SECTION 336 OF THE PROPOSED BILL PROHIBITS CONSOLIDATED RETURNS.

This should be stricken out and some proper provision adopted permitting affiliated returns. Many mining corporations are subsidiary operating companies with identical ownership and inter-transactions with a parent company making it all one business. The Treasury Department has recognized the necessity of such by Article 77 of Regulations 41.

TEAM WORK AT PENNA. COAL AND COKE CORPORATION'S MINES

There are good concrete examples available to show what coal operators and coal miners are doing toward greater production to meet the nation's war needs. The Pennsylvania Coal and Coke Corporation, operating thirty-two mines, illustrates what scientific team work will do. Though the pay-roll at the end of August showed fewer miners than in April, the percentage of time worked was increased from 85 in April to 88 per cent in August, while the company's output was increased from 282,331 tons in April to 331,947 tons in August, M. D. Edmonds, of the Fuel Administration, reports.

As explained by R. D. Mainwaring, superintendent for the company, with headquarters in Cresson, the speeding-up system was put into effect by the corporation in May. Each mine is divided into sections, and a "section foreman" is placed in charge. Each day this section man makes a detailed report on each miner who is at work or who should be at work. The report includes the hours worked by the tippie, the hours worked by the individual miner, the number of mine cars he loaded, whether at pick work, machine work or "cut and load"; the additional cars needed, if any; the time the first car was placed, the time the last one was placed, and the reasons for loss in tonnage if the miner's output does not come to the average. These daily reports are digested every half month into a semi-monthly form covering each man employed. The semi-monthly digest covers tonnage losses due to the company's faults or misfortunes, losses due to the employee through illness, drunkenness or whatever cause, and losses due to unavoidable causes, such as insufficient railroad cars or insufficient power.

From the daily sheets the colliery "truant officer," for that is what he really is, gets his notes on absentees and makes personal visits to learn the cause for failure to work. These reports are tabulated, and some of them make interesting reading. Unfortunately in all too many cases booze is responsible for absence from work, and Mr. Mainwaring agrees that the excessive use of liquor is the greatest avoidable obstacle to increased coal output.

It is to be noted that the section foremen are supposed to report everything which results in decreased output. The result is that the company's shortcomings go down on the list in case the company is responsible. Thus if a miner is held up two hours for lack of supplies it goes down, and it is the foreman who must explain. If a certain section of the mine, for example, were to lose right along by a regular succession of accidents it is quite likely the boss would have to give some good reasons to justify himself. In short, the system seems to have had the effect of putting everybody on his toes and keeping him there. The result is an increase of almost 50,000 tons for August over April, and they

are now talking of 335,000 tons for September. That would be more than 100,000 tons over last January's mark.

All told, the Pennsylvania Coal and Coke Company employs between 150 and 200 persons in this production system. The daily tonnage reports, under this plan, are posted at each mine and the weekly totals mined by each colliery are to be posted in the same way, so each mine can keep track of its competitors. Some of the section foremen report surprising achievements. Thus Section 2, Colliery No. 10, for the first half of August had an efficiency rating of 128, based upon what had been calculated as its probable output.

A typical half-month report for one of this company's mines shows that while 4,914 cars had been expected, 4,083 were mined, the efficiency percentage being 83.10. Several hundred cars were lost for unavoidable causes, but in the list was the loss of 134 attributed directly to drinking.

There are some aspects of these highly practical production reports which sound the note of human interest and human worthiness, too. Time and again, in places where it might be expected seven or eight cars a day would be loaded, it is found that only five or six have been turned out. Over along the side will be seen the notation, "old man." These are the veterans of coal mining, not so good as they once were, but willing to do what they can. Truly they are gladiators, those "about to die," saluting the republic through the medium of their conscientious labor, and steeling the arm of the republic against its foes.

WAR MINERALS BILL PASSES SENATE WITHOUT OPPOSITION

Before this issue of the JOURNAL will have found the tortuous way through the printing establishment, the War Minerals bill will have become a law. The bill passed the Senate after considerable debate without a roll call. Despite the radical changes made in the bill by the Senate, the House conferees accepted the measure with minor changes. The House itself was not so easily satisfied, but after considerable talk decided that the conferees had not shown poor judgment after all. The Senate agreed to the conference report without comment.

There is no certainty at this writing as to the action the President will take under the new legislation. It is expected, of course, that matters of allocation and price-fixing will be given over to the War Industries Board, but whether the other powers will be given to the Bureau of Mines or divided between the two agencies cannot be stated with authority. The matter has been the subject of much interested speculation.

WORLD'S PRODUCTION OF PETROLEUM

[Prepared by J. D. Northrup, United States Geological Survey, Department of the Interior.]

Country	Production, 1917			Total production, 1857-1917		
	Barrels of 42 gallons	Metric tons	Per cent of total	Barrels of 42 gallons	Metric tons	Per cent of total
United States.....	(a) 335,315,601	44,708,747	66.98	4,252,644,003	567,019,201	60.89
Russia.....	(b) 69,000,000	9,418,509	13.78	1,832,583,017	242,336,152	26.24
Mexico.....	55,292,770	8,264,266	11.04	222,082,472	33,166,241	3.18
Dutch East Indies.....	(c) 12,928,955	1,778,495	2.58	175,103,267	23,628,200	2.51
India.....	(b) 8,500,000	1,133,333	1.70	98,583,522	13,144,469	2.41
Galicia.....	5,965,447	(d) 829,629	1.19	148,459,653	20,646,663	2.13
Japan and Formosa.....	2,898,654	386,487	.58	36,065,454	4,808,727	.52
Rumania.....	2,681,870	(b) 373,000	.54	142,992,465	19,283,174	2.05
Peru.....	2,533,417	337,789	.51	21,878,285	2,917,104	.31
Trinidad.....	1,599,455	222,456	.32	5,418,885	753,670	.08
Argentina.....	1,144,737	168,340	.23	3,047,858	436,033	.04
Egypt.....	1,008,750	134,500	.20	2,768,686	369,158	.04
Germany.....	995,764	(b) 140,000	.20	15,952,861	2,155,974	2.30
Canada.....	208,332	27,378	.04	24,112,529	3,215,004	3.50
Italy.....	50,334	(b) 7,000	.11	947,289	133,919	.01
Other countries.....	(b) (e) 530,000	70,667		927,000	123,600	.01
	500,651,086	68,000,596	100.00	6,983,567,246	934,137,289	100.00

(a) Quantity marketed.
(b) Estimated.(c) Includes British Borneo.
(d) Estimated in part.

(e) Includes 19,167 barrels produced in Cuba.

PUBLIC OPINION SUPPORTS
GASOLINE SAVING ORDER

Many and effective are the methods adopted by patriotic citizens to shame those who ignore the request that pleasure driving of automobiles be discontinued on Sundays.

The Fuel Administration was content with making known the necessity for gasoline saving and made no effort at enforcement of the Administration's request. Public opinion proved all potent in seeing that the request was generally heeded.

In several cities the boys made life miserable for motorists who failed in their duty. Epithets were hurled at these drivers. In some instances where automobilists ignored the request and displayed flags on their machines, these emblems were removed with the contention that anyone who so failed in his patriotic duty had no right to display the flag.

The women in many cities constituted themselves an efficient factor in seeing that the request was complied with. Sunday motorists were stared at and the women made plain in other ways their unfavorable opinion of those who declined to obey the request of the Fuel Administration.

In many places the police took a hand by requiring all motorists to explain their purpose in using their cars on Sunday. The newspapers led public opinion by the manner with which, without exception, they criticised those who used their cars. Some papers even printed a list of those who ignored the re-

quest, so that the neighbors of the violators might know and, through their scorn, act as a powerful influence against the violation being repeated.

PRESBYTERIAN WAR COMMISSION
TO URGE COAL PRODUCTION

The War Commission of the Presbyterian Church, seventy laymen and preachers from all parts of the United States and Canada, called at the United States Fuel Administration to tender their services in any capacity they might be found of use.

Moderator J. Frank Smith, of Dallas, Tex., stated to James B. Neale and P. B. Noyes, who received the commission on behalf of Fuel Administrator Garfield, that the members of the War Commission were preparing for a speaking drive to cover the entire nation from November 10 to December 10.

The facts as to the tremendously increased demand for coal production caused by the war, the danger of a shortage that might cripple the war machine, and the vital need of conservation were dwelt upon in addresses by Messrs. Neale and Noyes, who afterwards furnished the members of the commission with material to be used in their speeches in aid of the Fuel Administration's work.

USERS OF PLATINUM BROUGHT UNDER LICENSE

Regulations Are Issued—Hennen Jennings Sets Forth Advantages to Be Gained by Bringing Industry Under Control.

Regulations for the sale, possession and use of platinum, iridium and palladium have been prepared by a committee consisting of Hennen Jennings, Dr. C. L. Parsons, of the Bureau of Mines; J. M. Hill, of the Geological Survey; C. H. Conner, of the War Industries Board; Dr. W. F. Hillebrand, of the Bureau of Standards. Mr. Jennings discusses the situation as follows:

Through the Secretary of War, the Chemical Section of the War Industries Board, in February, 1918, was given power to requisition platinum for government purposes. Three requisition orders have been issued, each one broader in scope than the preceding. On February 23 the first covering only 14 names was issued; on May 1 the second covering over 900 names; and on June 25, the most recent, covering 1,555 names. Negotiations for raw platinum are being carried on by the Ordnance Department and War Industries Board in foreign countries. The War Industries Board have not, however, heretofore, had adequate machinery for dealing with licensing or the enforcement of rules and regulations. Mr. Conner was made Chairman of the Platinum Section of the War Industries Board in March, 1918.

The powers granted you under the Act of October 6, 1917, carry an appropriation of \$300,000 and have permitted a great organization for the proper administration of the Act, as the organization comprises 49 United States Explosives Inspectors, one in each State, and each inspector has an advisory committee of from 10 to 20 men, with a state-wide organization of several men to a county and numbering nearly 5,000 members. In addition, there are some 15,000 licensing agents throughout the country, and in Washington an organization of some 60 persons. A penalty is provided for the violation of any of the provisions of the Act, by a fine of not more than \$5,000 or imprisonment of not more than one year, or both fine and imprisonment.

By the Appropriation Act of July 1, 1918, the Director of the Bureau of Mines' powers were enlarged in connection with the Explosives Act, as under:

Provided, That any license issued under the Act of October sixth, nineteen hundred and seventeen, may be canceled by the Director of the Bureau of Mines if the person to whom such license was issued shall, after notice and an opportunity to be heard, be found to have violated any of the provisions of the Act:—*Provided further*, That platinum, iridium, and palladium and compounds thereof, are hereby

made subject to the terms, conditions, limitations of said Act of October sixth, nineteen hundred and seventeen, and the Director of the Bureau of Mines is hereby authorized, under rules and regulations approved by the Secretary of the Interior, to limit the sale, possession and the use of said material."

Neither the Act itself nor the amendment gave the power to requisition the metals or appropriation to purchase them.

One of the great advantages of these new regulations and the machinery for enforcement through the personnel of the explosives organization, is that it will permit in the future the obtaining of more accurate information as to the stock on hand, the relative consumption and uses, and the future requirements of these metals in various industries. From the discussion of these regulations and a general study of the subject, as well as my own experiences, I have been impressed with the great discrepancies of estimates and the impracticability of obtaining accurate statistics by mere favor or request, without authoritative edict accompanied by penalty.

Representatives of the War Industries Board have set forth the sudden and great increases that the government authorities had found it necessary to make in connection with platinum, etc., requirements. In fact the Government's estimate of requirements was only 40,000 ounces in March and 69,000 in June. Their statement of stocks on hand, while large, is not reassuring should the war continue for years, and the Russian platinum mining be long suspended by internal revolution.

For the year 1913 the world's production of crude platinum has been given at about 313,000 ounces troy, while for 1917 only 83,000 ounces; thus at present there is obtained from all the mines only 26½ per cent of the pre-war output. In 1913 Russia was credited with 95 per cent of the total and in 1917 only 60 per cent.

Iridium is associated with platinum and the supply of this metal is for the most part obtained from the platinum deposits of Russia. Platinum was discovered in Colombia, South America, in 1735. In 1810 it commanded only from 30 to 40 cents an ounce. It was found in Russia in 1819. In 1828 it had a value of about \$7 an ounce. The fluctuation in values of platinum and iridium from 1901 to 1914 is most noticeable, the price per troy ounce of platinum varying from \$14 to \$36. Since 1914 platinum and its allied metals have varied in price as follows: For 1914, platinum \$45, iridium \$65, and palladium \$44; 1915, platinum \$55, iridium \$83, and palladium \$67; 1917, platinum \$103, iridium \$150, and palladium \$110; 1918, platinum \$105, iridium \$175, and palladium \$135, the Government fixed prices.

Next to Russia, Colombia produces the largest amount of platinum and presents the most promise of larger future outputs under stimulus of higher prices. Platinum in this country is found in many places but in small quantity, being less than 1 per cent of the world's production, but with the present high

price its discovery and production in this country may be somewhat increased.

The United States Mints should give further aid by making report and payment as far as possible of the platinum received by them. In fact, the mints should be given appropriation and facilities to better deal with the platinum situation.

The seriousness of the platinum metals situation lies in the fact that as the output of the mines have been decreasing so have the demands for essential and industrial requirements—thus war needs—have been steadily and greatly increasing.

Platinum and its associates are far more rare than gold. In the 1917 report of the Geological Survey, it was shown that the estimated output of platinum in the world varied from 5,000,000 to 11,000,000 ounces, whereas the Director of the Mint's statistics would go to show that about 830,000,000 ounces of gold have been mined since the discovery of America; thus the output of gold by weight has been in the neighborhood of from 80 to 100 times that of platinum.

As an ornament, the lustre and color of platinum is inferior to gold, but more than its equal in indestructibility. It is superior to gold in its infusibility and more useful for industrial purposes. Its electrical usefulness is also far greater than gold. It is a misfortune, therefore, that with only a limited and waning supply of platinum found in the placer deposits, it has ever become fashionable as an ornament, and its use as such should be discouraged in all reasonable ways. These regulations and requisition orders submitted, prevent further manufacture of platinum for all ornamental and non-essential purposes during the duration of the war. It is not, however, intended to now prevent the sale of platinum jewelry already manufactured. It is believed that in case of great need the women of the country will be willing to give up their platinum ornaments for the benefit of their country.

The varied uses of platinum, iridium, and palladium are indicated in the listment of licenses in the regulations. In the Geological Survey Report on "Platinum and Allied Metals," for 1917, these uses are given in considerable detail, and are finally summarized as follows:

"Platinum, iridium, and palladium, are essential for the conduct of the war; platinum, principally for the chemical industry; iridium, chiefly for the electrical industry; and palladium, for the dental industry, in order that more platinum may be released for chemical work."

At present platinum has been provided for plants with total capacity of 2,200,000 tons production of concentrated sulphuric acid. The new plants and expansion of old ones are now planned to bring up the output to 3,000,000. This will require an extra 32,000 ounces of platinum for catalyzing purposes.

The nitric acid output of the country is about 1,000,000 tons a year, made very largely from Chile saltpeter and without the use of platinum. When our nitrogen fixation plants are in operation and our by-product coke ovens expanded it will be necessary to convert their ammonia products into nitric acid by use of platinum as a catalizer. The government is now spending \$100,000,000 in obtaining nitrogen from the air and the by-product coke ovens are being largely increased by private enterprise. If by any chance we should be cut off from Chile, all nitric acid would have to be made by the oxidation of ammonia requiring platinum gauze catalizer for new plants at the rate of 25 or 30 ounces per 1,000 tons yearly capacity of nitric acid. The platinum in use in these processes is not destroyed by the acid but can be and is used over and over again. The other important requirements of platinum compounds include contact points in magnetos for aeroplanes, trucks, automobiles, also telegraph instruments, etc., etc., and for chemical laboratory apparatus.

The platinum regulations are as follows:

The following regulations are hereby promulgated under the provisions of the Act of October 6, 1917, (40 Stat., 385), as amended by the Act of July 1, 1918, (Public, No. 181), authorizing the Director of the Bureau of Mines, under rules and regulations approved by the Secretary of the Interior, to limit, during the period of the war, the sale, possession, and use of platinum, iridium, and palladium, and compounds thereof:

SECTION I. The War Industries Board is hereby designated under section 21 of the Act of October 6, 1917, and the President's proclamation of October 26, 1917, as the agent of the Director of the Bureau of Mines in the execution of the regulations as hereinafter indicated.

SEC. II. From and after the date of these regulations, under the penalties prescribed by section 19 of the Act of October 6, 1917,¹ no person² shall:

PAR. a. Use any platinum scrap, iridium, or iridium scrap, palladium or palladium scrap, and/or compounds thereof, in the manufacture, alteration, or repair of any ornament or article of jewelry.

PAR. b. Manufacture for use in dentistry

¹ Section 19 of the Act of Oct. 6, 1917, is as follows:

"That any person violating any of the provisions of this act, or any rules or regulations made thereunder, shall be guilty of misdemeanor, and shall be punished by a fine of not more than \$5,000, or by imprisonment not more than one year, or by both such fine and imprisonment."

² The word "person," for the purposes of these regulations, shall be construed in accordance with the definition contained in section 4 of the Act of Oct. 6, 1917, which is as follows:

"That the word 'person' when used herein shall include States, Territories, the District of Columbia, Alaska, and other dependencies of the United States, and municipal subdivisions thereof, individual citizens, firms, associations, societies, and corporations of the United States and of other countries at peace with the United States."

any metal, metal parts, or alloys containing more than 20 per cent by weight of platinum or 40 per cent by weight of platinum, iridium, and/or palladium combined, or manufacture supplies therefrom.

SEC. III. From and after the date of these regulations, under the penalties prescribed by section 19 of the Act of October 6, 1917, no person shall without a license—

PAR. a. Purchase, sell, barter, or deal in unmanufactured platinum, iridium, or palladium, or compounds thereof (including crude, scrap, filings, polishings, or sweeps), except that sales may be made without a license to an authorized agent of the United States or to a licensee authorized to purchase the same; or possess for more than 90 days after the date of these regulations one ounce troy, or more, of such unmanufactured platinum, iridium, palladium, or compounds thereof.

PAR. b. Possess, use, sell, purchase, or barter, for purposes connected with his business, platinum, iridium, palladium, or compounds thereof (except that sales may be made without license to an authorized agent of the United States, or to a licensee authorized to purchase the same), if such person be engaged in—

No. 1. Producing platinum, iridium, or palladium, or compounds thereof, by mining.

No. 2. Producing sulphuric acid, nitric acid, or other chemical products where platinum, iridium, palladium, or compounds thereof are used in such production.

No. 3. Importing or exporting platinum, iridium, or palladium, or compounds thereof.

No. 4. Producing platinum, iridium, or palladium, or compounds thereof, either as a primary product or as a by-product of smelting or refining.

No. 5. Manufacturing electrical appliances and/or parts thereof containing platinum, iridium, or palladium, or compounds thereof.

No. 6. Manufacturing surgical appliances and X-ray apparatus containing platinum, iridium, or palladium, or compounds thereof.

No. 7. Manufacturing chemical apparatus and reagents of all kinds containing platinum, iridium, or palladium, or compounds thereof.

No. 8. Conducting or operating chemical laboratories in which platinum, iridium, or palladium, or compounds thereof, are used.

No. 9. Manufacturing scientific instruments containing platinum, iridium, or palladium, or compounds thereof.

No. 10. Manufacturing and/or distributing dental supplies containing platinum, iridium, or palladium, or compounds thereof.

No. 11. Manufacturing and/or dealing in jewelry containing platinum, iridium, or palladium, or compounds thereof.

No. 12. Manufacturing or producing any article or product not mentioned above where such business requires more than one ounce troy per month of platinum, iridium, or palladium or compounds thereof.

SEC. IV. Applications for licenses shall be made under oath to any licensing agent duly

authorized under the Act of October 6, 1917, as provided in the regulations issued under this act.

SEC. V. Every applicant for a license will be required to submit with his application a sworn inventory of all platinum, iridium or palladium or compounds thereof in his possession or control; and every licensee will be required to submit at such times as may be designated by the War Industries Board a sworn inventory of his holdings of platinum, iridium, or palladium or compounds thereof in whatever form they may be.

The Director of the Bureau of Mines, at the request of the War Industries Board, may at any time require from any user or possessor a detailed sworn inventory of any and all materials held by him containing platinum, iridium, or palladium or compounds thereof, and such inventory must be furnished promptly upon receipt of such requirement.

SEC. VI. All licenses shall be issued in the name of the Director of the Bureau of Mines and countersigned and delivered by the War Industries Board, and shall be, and remain subject to the following conditions:

PAR. a. Each license shall contain such appropriate conditions as the Bureau of Mines, through the War Industries Board, may impose.

PAR. b. The Bureau of Mines through the War Industries Board may change the conditions of the license from time to time, as it may deem necessary.

PAR. c. Records shall be kept by each licensee of all his sales, purchases and other transfers of platinum, iridium or palladium or compounds thereof, and of articles containing platinum, iridium, or palladium or compounds thereof, with the names and addresses of the purchasers, sellers, and/or transferees, and the quantities involved, which records shall be open at all reasonable times to the duly authorized representative of the Director of the Bureau of Mines.

PAR. d. Any and all platinum, iridium, or palladium, or compounds thereof, acquired under the authority of such license shall be used strictly for the purposes and in the manner stated in such license.

PAR. e. Upon request of the War Industries Board, the licensee shall report the prices at which sales of his products containing platinum, iridium, or palladium, or compounds thereof, are being made, and the right to prohibit further sale of such articles at prices deemed exorbitant by it reserved to the War Industries Board.

SEC. VII. Any licenses issued hereunder may be revoked for violation of any of these regulations, or for violation of any of the conditions contained in such license, or if such revocation is deemed necessary or advisable for purposes of the national security and common defense.

SEC. VIII. The War Industries Board will, upon request, furnish a list of government agents or licensees authorized to purchase

platinum, iridium, or palladium, or compounds thereof. Neither the United States nor its representatives will assume any responsibility, financial or otherwise, where sales are made to licensees.

Sec. IX. The prices at which platinum, iridium, or palladium will be purchased by a duly authorized agent of the United States or by such licensee as may be authorized to purchase or sell platinum, iridium, or palladium, or compounds thereof, will be such prices as may be determined by the proper governmental agency authorized to determine such prices.

Sec. X. Whenever such government agents and such licensees as may be authorized to purchase platinum, iridium, or palladium or compounds thereof, shall refuse to purchase the same from any person who is compelled by these regulations to sell the same, or is forbidden by these regulations to possess or use the same, then such person shall promptly notify the Platinum Section, War Industries Board, Washington, D. C.

Sec. XI. These regulations shall not operate to relieve any person upon whom an order requisitioning platinum, iridium, or palladium or compounds thereof may have been or may hereafter be served, from any obligation imposed upon him by such order.

Sec. XII. These regulations are supplemental and amendatory to the regulations heretofore issued under the Explosives Act of October 6, 1917.

CRUDE OIL REQUIREMENTS ARE 25,000,000 BARRELS GREATER FOR 1919

Before a public meeting at Cooper Union, New York City, September 28, held under the auspices of the United States Fuel Administration, M. L. Requa, Director of the Oil Division, presented some interesting facts as to the shortage of gasoline. His plea was for as great a conservation and lack of waste of gasoline as possible. He said:

"We will need this year, to meet only a normal increase in consumption, not less than 25,000,000 barrels of crude oil more than we used last year. We used only 16,000,000 barrels in 1897. This grew to 166,000,000 barrels in 1907 and to 340,000,000 barrels in 1917. If we are to meet this normal rate of growth, we must have not less than 365,000,000 barrels in 1918. This is 66 per cent of the total production of the world, and yet it is not enough."

Mr. Requa spoke of the difficulties of transportation, and said that although the pipe lines bringing oil from Oklahoma had been largely increased, no more oil could be carried than was carried at present unless new pipe lines were built.

Speaking more directly of gasoline, he said:

"In the first half of 1918 our gasoline pro-

duction has increased more than 8,000,000 barrels, but our consumption has more than kept pace with this. Our stocks of kerosene are 2,000,000 barrels less than on the first of this year, and our stocks of crude oil are 12,000,000 barrels less.

"All demands for export will continue to be met from the 350,000,000 barrels of crude oil, the 80,000,000 barrels of gasoline, the 40,000,000 barrels of kerosene, and the 170,000,000 barrels of fuel oil that will probably be produced this year."

Referring to the "gasolineless Sunday," about which hitherto no figures have been available as to the amount of gasoline saved, he said:

"'Gasolineless Sunday' is a magnificent success, in that it has made it possible to load for France ten cargo boats of gasoline, of 50,000 barrels each, which otherwise could not have been shipped; and that has been done by the voluntary effort of a free people on the mere request of the Fuel Administration."

OUTPUT FOR WEEK OF SEPT. 21 TOTALS 12,650,000 TONS

For the week ending September 21 the bituminous coal production varied little from that of the week preceding. The output is estimated at 12,650,000 net tons. This is 4 per cent below the production during the week of September 14, but it exceeded the production of the corresponding week of 1917 by 19.4 per cent, or 2,060,000 net tons. The daily average during the current week is estimated at 2,108,000 net tons, which is slightly lower than the week preceding, but considerably in excess of the daily average during the week of September 21, 1917.

The strike in the anthracite fields during the week of September 21 caused production to decrease 11.5 per cent. The output is estimated at 1,847,000 net tons, as compared with 2,088,000 net tons during the week preceding, and as against 2,006,000 net tons during the corresponding week of 1917. The daily average during the current week is estimated at 308,000 net tons, considerably less than the daily average for the coal year to date of 337,000,000 net tons, which is 2.1 per cent in excess of the daily average of the same period of last year.

Bituminous coal dumped at Lake ports during the week ended September 21 amounted to 1,143,568 net tons, a slight decrease compared with the week preceding. However, compared with the weekly average during July, August and September, the current week's tonnage was 80,000 net tons, or approximately 8 per cent in excess.

ASKS FOR REVENUE ACT FAIR TO MINING INDUSTRY

James F. Callbreath Appears Before Senate Finance Committee to Urge that Inequalities Be Taken from the Bill.

In a plea for a more equitable revenue law, James F. Callbreath, secretary of The American Mining Congress, appeared before the Senate Finance Committee. A portion of Mr. Callbreath's remarks on that occasion, together with a portion of the colloquy which arose, follows:

"Mining is a wasting industry. To the extent that it produces, it reduces the original estate. Its invested assets are continually growing less. It is peculiar in another sense, in that it is a short-lived industry and an industry carrying great hazards. All of the possible supply of minerals for all future time is now in existence. A mine with a life of ten years, each year sells one-tenth of its original holding. The proceeds of that sale appear to be a profit. That part of such proceeds which represents the value of the ore is not profit but rather a transfer of property from one form to another, i. e., a sale of one-tenth of the estate.

"I call attention to these peculiar conditions concerning the mining industry, as a basis for some concrete illustrations which I believe will aid your committee in reaching a conclusion as to how the mining industry can be made to pay its full share of the tax required and at the same time so apply this tax as to stimulate that high production of the minerals which are necessary to the effective prosecution of the war.

"Every business to be profitable must be able to earn a reasonable return on the capital invested and during the time of its operation pay back the original expenditure. This rule applies to all lines of business alike. A business which is continuous in its operation has a longer period in which to amortize its investment. The shorter lived the operations, the larger must be the amortization fund. A zinc mine in the Joplin district has an active life of approximately two and one-half years, i. e., a mill by two and one-half years of continuous operation can prepare for market all of the ore within economic hauling distance. A mill with no ore may be worth for removal elsewhere 10 per cent of its original cost. It follows that to make a zinc mine profitable it must be able to earn approximately 50 per cent annually for two and one-half years, to pay back the original investment and a reasonable profit thereon. Such a company must be permitted to amortize the original investment during the life of its operation. Otherwise a war profits tax or an excess profits tax, as provided by the bill under

consideration, not only takes all of the profit but a considerable percentage of the original capital.

"Under the war profits provision of this bill deduction is limited to 10 per cent of invested capital (p. 57, Sec. 312, par. (b), subdivision 2); and under the excess profits method deduction is limited to 8 per cent (p. 58, Sec. 316).

"We believe that this deduction is entirely inadequate in all short-lived mines. To so levy a tax as to take the original investment under the guise of profits would be to paralyze many mining districts and shut off the supply of minerals needed for war and industrial purposes. The Joplin district has a population of approximately 225,000 people—175,000 of whom depend absolutely and entirely upon the zinc mining industry. Any condition which will prevent development of new mines will in a short time put an end to the industry. This would result, first, in a very serious injustice to the people who live there; second, it would make that community unable to pay a tax in the future; and, third, it would so disturb the zinc market as to bring great burdens to the Government because of the lack of an important war material. The Joplin-Miami district produces more than 40 per cent of the zinc of the nation. Before the war competitive conditions had depressed the market price of zinc below the average cost, and the production capacity of the zinc mines had been greatly decreased. During the early days of the war, because of the scarcity thus created, the price of spelter in the domestic markets went to a point above 30 cents per pound. To take from the market 40 per cent of our usual supply would necessarily increase the price to a point which would be very burdensome to the Government needing directly and indirectly large supplies of zinc.

"A mine or an oil well is a very different property from any other. Owners of mines and wells must seek, find, and extract their product from beneath the earth, and finding a commercially productive mine or well is so rare that many fail where one succeeds. The process of seeking and finding ore in a mine requires an immense expenditure for development work which is not carried to capital account. In the case of a great majority of the smaller enterprises, each mine is owned by a separate company, and cannot add to the purchase price of its properties the expenditures for development work and losses sustained in proving other properties to be valueless, an advantage possessed by the large corporation.

"The investment needed to extract and reduce ore varies greatly with its mineral contents. When the ore is mined out the capital is absolutely gone. All these facts are taken into account by investors which,

recognizing the hazards of these businesses, require an actual income of from 12 to 15 per cent to establish a market value of par, fully double the ordinary interest rates required. The Internal Revenue Bureau of the Treasury Department has recognized this distinction, and I believe it to have been as liberal as it could possibly be under the law in attempting to make the present law meet the governmental requirements without exacting from owners of mines and wells a greater tax proportionately than other lines of business. The peculiar nature of mines and wells is not fully recognized in the bill under consideration. It defines their 'invested capital' just as that of other corporations, giving them no benefit whatever from the discovery and development of new ore bodies.

"So far as mines are concerned, the definition of 'invested capital,' Section 325 of the present bill sets a premium on the discreditable devices of the past twenty years intended to work out and inflate book values as the basis for the issue of watered stock, while legitimate mining companies of many years' standing, which have charged off their expenditures against operations on the theory that a mine is a wasting property, will be penalized for having done so.

"I desire to call attention to one provision of the present law which has worked much of injustice to small companies and possibly has lost the Government much larger sums, which overcapitalized companies have escaped. Section 326 of the proposed act, subdivision 'a,' subsection 2, contains the following language: 'But in no case to exceed the par value of the original stock or shares specifically issued therefor.'

"To limit 'invested capital' to the par value of the stock taken in exchange for property at the time of its acquisition is peculiarly unjust in the case of the smaller mining companies which, in most cases, are organized to own a single mine after its promoters have spent large sums in prospecting and developing. These owners have in many instances acquired and developed a large number of worthless properties before they have developed a productive mine and have expended large sums to put this mine on a paying basis, not by sitting and watching it grow, but by the expenditure of large amounts of money, labor and energy. It has by this means increased the value of this property and should in all justice be permitted to utilize this increased value in determining its invested capital. Under this part of the section a company which issues stock conservatively in an amount less than the real value of the property would be limited to such amount even though the property had an actual value much in excess of the face

value of the stock, while a corporation which was grossly overcapitalized at the time of the purchase of its property for stock would get the benefit of the increased value of the property up to the par value of the stock issued. This inequity is cured where stock is issued with no par value (Sec. 325, par. B, p. 61), but where the fiction of a corporation is used as a convenient means for dividing the interest of business associates and a share of stock represents a certain interest in the property of the corporation entirely uninfluenced by its face value, it seems entirely evident that this limiting clause cannot but work injustice. A specific instance will illustrate:

"A few years ago the executor of a New York estate, in order to divide among the heirs a mining property which could not then be properly liquidated, organized a corporation with a capital stock of \$10,000 to which the mining property was transferred and divided the shares in proper proportions among the heirs. In the year 1916 that corporation paid taxes on a capital valuation of \$2,700,000.

"Under a strict construction of the present revenue law and under the proposed law, the invested capital of this company upon which it could make deduction is limited to \$10,000, while its actual invested capital is \$2,700,000. Under the proposed law this company is liable to pay 8 per cent of \$2,690,000, or \$215,200 more than it would have been required to pay had its capital stock been fixed at the fair value of its property.

"It is understood that the revenue department, recognizing this injustice, has in some instances permitted this excess value to be treated as 'paid-in or earned surplus,' and by this device has avoided the unjust technical requirement of the law. But what assurance can be given that future Treasury officials will be as fair in the administration of the law as those who now serve in that capacity with so much of satisfaction to the public?

"It would seem, in view of the large latitude of authority given to the Treasury Department to fix the value of property where the face value of the capital stock exceeds the value of the property, that it can be relied upon to fix a fair value where the face value of the capital stock is less than the value of the property. In other words, the same power in the Treasury Department which is authorized to fix the value of the property of an overcapitalized corporation may be and should be intrusted with power to fix the value of the property of an undercapitalized corporation.

"It seems proper to also suggest that settlements made by the Treasury Department in good faith and where all the facts have been presented by the taxpayer should be

considered as final settlements. It seems but fair to business interests after meeting all requirements to know that the matters are finally determined.

"The strict application of this provision is likely to work an equal injustice to the Government. Let us assume that a mining company had invested \$500,000 in a property and that 75 per cent of its reserve had been worked out prior to January 1, 1917, so that during the taxable year the company had but 25 per cent of its original investment involved. During the year 1917 this company might have made an unusual profit, but under the provision referred to it would be permitted to deduct 8 per cent of the \$500,000 originally invested, instead of 8 per cent upon the \$125,000 actually invested.

"Much inequity has resulted from the custom of the revenue department in valuing ore bodies at the purchase price 'at the time of such payment,' as required in Section 326, line 10, page 61. The result of this is to fix different values upon property in all respects absolutely equal in value. Companies A and B own adjoining sections of land of equal but nominal value, for which they respectively paid \$10 per acre. Each at an expense of \$100,000 develop ore, oil or coal reserves worth \$1,000,000. Company B sells its holdings to Company C for \$1,000,000. Company A is entitled to a deduction of 8 per cent on cost of land (\$6,400) and cost of improvements (\$100,000), total \$106,400. Company C is entitled to a deduction on cost of property of \$1,000,000.

"This is an abstract illustration, but inequities of this sort will be found in many, if not all, coal districts. This grows out of the proposal that an ore body is worth just what it costs, without regard to the losses in the development of worthless properties, without regard to the hazardous nature of mine development, and without regard to actual value of the property. We submit that there will be a few gamblers at the table where most men lose and where the winner is immediately divested of the rewards of his lucky chance; in other words, that the development of new mining properties absolutely essential to maintaining our mineral supply will not be made except this inequity is provided for and the successful operator is allowed a reward proportionate to the hazard involved in his enterprise.

"I might say that if you desire it I would be glad to furnish you with numerous instances of coal mines located absolutely side by side, the properties absolutely the same in every respect, where one company is able to take out three or four times as much as the other."

Senator Penrose. Has not this matter of depletion in connection with mining companies been taken up with the Treas-

ury Department and this Adams Commission?

Mr. Callbreath. Yes.

Senator Penrose. Have they ever come to any conclusion yet upon the subject?

Mr. Callbreath. Of depletion? They have administered the present law in a way that I believe has been counted fair by most of those who have settled with the Treasury Department.

Senator Penrose. Would not this general question you are touching on come under that process of adjustment in the department?

Mr. Callbreath. Except this, there is no assurance that a settlement made with the department under these provisions which does not conform with the law is a final settlement, and there is no reason why a future Secretary of the Treasury, or some ambitious politician who desires to make a name for himself—

Senator Penrose. There are none such around, are there?

Mr. Callbreath. There may be.

Senator Penrose. Not under the present administration, anyhow.

Mr. Callbreath. The fact is that there is no assurance that those settlements are final, and if a settlement is made and a deduction is allowed which the law does not authorize, then the people have no assurance that the settlement is final.

Senator Penrose. Then the mining interests are fairly well satisfied with the equitable adjustment made up to date on their taxes, are they?

Mr. Callbreath. As compared with the inequitable law under which the settlements were made. We believe the Treasury Department has done the very best they could to meet the situation, and has in some instances gone around the strict provisions of the law in order to do justice.

Senator Penrose. Then your only apprehension is that the settlement is not final, and that someone later on could ask for a readjustment of the tax?

Mr. Callbreath. That is true, and another reason is that in many instances one man will adjust himself to the strict letter of the law, while another man will apply to the Treasury Department and get a reduction, which works an injustice between the two parties.

Senator Penrose. Would there be any way of appealing these cases to the court, and if the court affirms the Treasury's decision, would not that be final?

Mr. Callbreath. I presume that would be true. Those cases are so numerous that an appeal to the courts of all those who might be aggrieved would burden the courts unduly.

Senator Smoot. You have been assailed upon interpretations of the law rather than the law itself?

Mr. Callbreath. Yes.

An extreme case will illustrate the absurdity of a strict application of this limitation.

Two men each own an undivided one-half of a certain property. These two owner-ships were necessarily of the same value and earning the same income. Each of these men organizes a corporation to take over his holdings, each exchanging his rights in the property for all of the capital stock of the company which he organized. One organized a company with a large amount of capital stock. The other organized a company with a small amount of capital stock. The property earned a profit of 8 per cent upon the actual invested capital. One of these companies was obliged to pay a large excess profit tax, while the other pays no excess profits tax at all.

Another suggestion as to the proviso in Section 30, page 31, line 22. A tax of 12 per cent is levied against net income in excess of the amount distributed in dividends or paid in discharge of outstanding interest-bearing obligations, while profits not so utilized are subject to a tax of 18 per cent. This places a penalty of 6 per cent upon funds held either for necessary working fund or invested in Liberty Bonds.

We are expecting to place Liberty Bonds probably to the amount of \$16,000,000,000 during the coming year. A large part of these subscriptions, much the larger part, must come from the large business interests. Bonds bearing $4\frac{1}{2}$ per cent are to be sold to these corporations and a penalty of $1\frac{1}{2}$ per cent is levied against those who meet their patriotic duty. It would seem that this provision should be so amended as to permit corporations to hold necessary operating expenses and to purchase Liberty Bonds without the infliction of a special penalty.

It would seem that a distinction must be made in assessing a tax upon the earnings of an exceedingly short-lived enterprise, as compared with enterprises of longer life or permanent in their nature. A bill recently passed by the House of Representatives, H. R. 11259, known as the War Minerals bill, had for its purpose the stimulation of production of certain minerals necessary in war work, which heretofore have been imported from foreign countries, and of which there is now a shortage because of the withdrawal from foreign service of the vessels heretofore engaged in the importation of these ores. We have been importing above 2,000,000 tons of manganese, chrome, and pyrites from Brazil, New Caledonia, and Spain. These minerals are absolutely essential in the manufacture of steel and explosives. The fact that the supply of these minerals had heretofore come almost entirely from foreign countries affords some proof that these industries can-

not thrive at home under normal conditions unless protected by compensating import duties. No one can predict what the tariff policy of the United States will be after the war. In consequence no one is justified in expending a large sum of money for the development of a mine or the construction of a treatment plant in order to supply a temporary market. If the demand for these minerals shall be terminated in two years, then it is plain that a plant now erected must amortize the original investment during these two years in addition to earning the ordinary profit. The deductions for depreciation cannot be made to meet the situation because at the end of the two years a plant might be at least 80 per cent, in which case a 20 per cent deduction for depreciation for the two years would be fair, but the remaining value would be entirely valueless unless market conditions justified continued operation.

I do not feel justified in suggesting that these enterprises shall be exempted from war taxes, but I do urge that full authority shall be given and that this revenue law shall anticipate that deductions for depreciation of plants engaged in short-lived enterprises shall be sufficient to amortize the cost of construction and development during the working period of the enterprise. Operations developed for the purpose of supplying these rare minerals which are needed for war purposes can be more nearly compared to the Government constructed housing facilities and plants constructed for war purposes only, which at the conclusion of the war will be practically valueless. These plants are constructed by the Government because private enterprise cannot possibly be induced to create these facilities for the short time during which they may be operated. The same principle applies to the short-lived mining operations and unless provisions are made for apparently excessive depletion deductions these enterprises cannot and will not be developed. The same reasoning should apply to all short-lived enterprises whether operations are to be terminated by the want of a market or by the exhaustion of the ore bodies.

Senator Penrose. You refer to this bill in the Senate. Does your association advocate that measure?

Mr. Callbreath. The association has not spoken on that subject.

Senator Penrose. From your knowledge of the general sentiment among your mining associates, do you think they are in favor of it?

Mr. Callbreath. They are very much in favor of the general proposition involved in that bill; that is, the purpose for which the bill is planned.

Senator Penrose. It carries \$50,000,000, a small sum nowadays, but it is \$50,000,000.

Mr. Callbreath. But not too much, if the Government shall undertake to purchase the supply of these minerals which are required.

Senator Penrose. Have you examined the bill?

Mr. Callbreath. Yes, sir.

Senator Penrose. Personally do you approve of the bill in its details?

Mr. Callbreath. I do not.

Senator Penrose. I only ask these questions, Mr. Chairman, because we know we are called upon, by grinding taxes, to raise this money from the taxpayers, and I think maybe we can make an incidental reference to some of the expenditures.

Senator Thomas. I think the question is quite pertinent.

Mr. Callbreath. I should be very glad to discuss that bill.

Senator Penrose. I personally should like to have some illumination on that.

Mr. Callbreath. My thought is that all of these minerals which are essential to the country at this time, which cannot be produced under ordinary conditions, should be provided by the Government in that way, and that those minerals can be produced. New enterprises cannot be created for a period of a few months or a year or two unless some plan is devised by which the cost of the plant can be amortized during the period of the life of that operation. That would be impossible under a two or three year plant, unless the amortization fund be very large. We have been importing from Brazil approximately a million tons annually of manganese ores. We have abundant supplies of manganese ores in this country but of low grade, and it will be necessary to treat that ore in order to bring it up to the high standard required by the steel industry, and the cost of the treatment and the development of the processes for treatment are expensive. It would be bad business for any private concern to undertake to build a plant and work out the processes of treatment and reduction for a market which two years from now could be taken away by cheaply mined ore bodies in Brazil, with a freight rate of \$2 per ton to our shores.

Senator Penrose. Why, in this one crisis, when labor is very scarce, is it not economically wise to purchase this material from Brazil, which is a nation with which we are at peace?

Mr. Callbreath. If we can get it.

Senator Penrose. You say we are getting it.

Mr. Callbreath. We have been getting it, but that supply has been shut off because the ships which have heretofore transported it have been put into foreign service.

Senator Penrose. Then this bill is in a

measure to protect American industry at home?

Mr. Callbreath. I would not call it that.

Senator Penrose. It savors of that. It has that aroma.

Mr. Callbreath. It is a bill to develop industries at home which cannot stand after the war unless protection is afforded.

Senator Penrose. Then it is our duty during this war crisis to bolster up some defunct mining propositions so that they can stand on their feet after the war. Is that it?

Mr. Callbreath. No, Senator. My thought is that the low-grade manganese ores, running 15 to 18 per cent, of the great ranges in Minnesota, which can be developed to meet our requirements here at home, should be developed, and if I were to express my personal opinion, I would say that after the war is over such a protective tariff should be levied as to enable those activities to continue.

Senator Penrose. I heartily agree with you. But the present party in power disagrees with you.

GREAT INCREASE IN GASOLINE RECOVERY FROM NATURAL GAS

Statistics just compiled under the supervision of J. D. Northrop, United States Geological Survey, Department of the Interior, show that the natural-gas gasoline industry in the United States made marked progress in 1917.

The quantity of raw gasoline recovered from natural gas in 1917, including that produced by compression, by absorption, and by vacuum pumps, as well as that saved as drips from gas mains, was 217,884,104 gallons, a gain of 114,391,415 gallons, or 111 per cent, over the output in 1916. Of this quantity 168,921,555 gallons, or 77.5 per cent, was recovered by compression and by vacuum pumps and the remaining 49,017,549 gallons, or 22.5 per cent, by absorption and by salvage from gas mains. The combined product of gasoline obtained by compression and by vacuum pumps was greater than in 1916 by 83,998,768 gallons, or 99 per cent, and the product obtained by absorption and from drips was greater by 20,447,647 gallons, or 110 per cent.

The quantity of commercial gasoline represented by the output of raw gasoline in 1917, though not susceptible of accurate determination, probably amounted to more than 300,000,000 gallons.

The average price received in 1917 for the raw production at the sources of production was 18.45 cents a gallon, and the market value of the entire output was \$40,188,956, a gain of 4.6 cents in average unit selling price and of \$25,857,808, or 180 per cent, in gross market value as compared with 1916.

The volume of natural gas from which the output of natural-gas gasoline in 1917 was

recovered is estimated to have amounted to about 429,000,000,000 cubic feet, and the average recovery of gasoline per thousand cubic feet by all methods was about one-half gallon.

The number of plants, including vacuum-pump plants, recovering gasoline from natural gas increased from 596 at the beginning of 1917 to 886 at the end of that year, a gain of 49 per cent, and the combined daily capacity of all plants increased during the same period from 495,448 gallons to 902,385 gallons, or about 82 per cent.

PRESIDENT TAKES DRASTIC ACTION TO STOP STRIKE

The letter of President Wilson to the striking workmen at Bridgeport, Conn., is regarded in Washington as the most significant development in labor matters since the beginning of the war. The letter follows in full:

"I am in receipt of your resolutions of September 6th announcing that you have begun a strike against your employers in Bridgeport, Conn. You are members of the Bridgeport branches of the International Union of Machinists. As such, and with the approval of the national officers of your union, you signed an agreement to submit the questions as to the terms of your employment to the National War Labor Board and to abide the award which in accordance with the rules of procedure approved by me might be made.

"The members of the Board were not able to reach a unanimous conclusion on all the issues presented, and as provided in its constitution, the questions upon which they did not agree were carried before an arbitrator, the unanimous choice of the members of the Board.

"The arbitrator thus chosen has made an award which more than 90 per cent of the workers affected accept. You who constitute less than 10 per cent refuse to abide by the award although you are the best paid of the whole body of workers affected, and are, therefore, least entitled to press a further increase of wages because of the high cost of living. But, whatever the merits of the issue, it is closed by the award. Your strike against it is a breach of faith calculated to reflect on the sincerity of national organized labor in proclaiming its acceptance of the principles and machinery of the National War Labor Board.

"If such disregard of the solemn adjudication of a tribunal to which both parties submitted their claims be temporized with, agreements become mere scraps of paper. If errors creep into awards, the proper remedy is submission to the award with an application for rehearing to the tribunal. But to strike against the award is disloyalty and dishonor.

"The Smith & Wesson Company, of Springfield, Mass., engaged in government work, has refused to accept the mediation of the

National War Labor Board and has flaunted its rules of decision approved by presidential proclamation. With my consent the War Department has taken over the plant and business of the company to secure continuity in production and to prevent industrial disturbance.

"It is of the highest importance to secure compliance with reasonable rules and procedure for the settlement of industrial disputes. Having exercised a drastic remedy with recalcitrant employers, it is my duty to use means equally well adapted to the end with lawless and faithless employees.

"Therefore, I desire that you return to work and abide by the award. If you refuse, each of you will be barred from employment in any war industry in the community in which the strike occurs for a period of one year. During that time the United States Employment Service will decline to obtain employment for you in any war industry elsewhere in the United States, as well as under the War and Navy Departments, the Shipping Board, the Railroad Administration, and all other government agencies, and the draft boards will be instructed to reject any claim of exemption based on your alleged usefulness on war production."

FUEL ADMINISTRATION HAS SERVICE FLAG WITH FIFTY STARS

A service flag, bearing fifty stars, each star representing a former Fuel Administration employee now in active service, was hoisted on the building of the United States Fuel Administration with appropriate but simple ceremonies. In the presence of nearly one thousand employees the flag was hoisted, and Fuel Administrator H. A. Garfield, two of whose sons are also in the service, made a brief speech.

In speaking of the boys who are serving in the front trenches, Dr. Garfield took occasion to remind his hearers that they, too, were on active service helping to win the war. He cited the case of the American soldier who in writing home referred to the relative inactivity of the front line trenches as compared with the work of those at home who provided the necessary supplies, and he pointed out that it was the portion of those of us left behind to serve and, in a measure, fight as faithfully and as efficiently as those who actually bore arms. All of us who do our duty are in active service. The glory and honor of winning this world war was not all, he opined, for the soldier on the fighting line, but was to be shared by those industrial soldiers, the workers for Government, the miners, the shipbuilders and the munition makers, upon whose fidelity to duty our forces overseas had to rely.

ARE WE FACING A COAL FAMINE?

BY GEORGE H. CUSHING

The nation is on the eve of another winter, when attention naturally turns to coal. In only three winters in American history has coal been more than a matter of passing annoyance because it meant an additional expense. In 1902, in 1916, and in 1917 coal was a serious problem. In only one of those three years, 1917, was there ever a real shortage of coal.

In the afterwhiles, when we begin to discuss business in its broad phases, this one fact must be considered at its full worth. America has been producing coal for 110 years. Yet in only one of these was there a shortage. In 107 of those years there was always more coal than the people would buy. The coal industry has performed well when left alone.

Now we are at the beginning of another winter. What will be the situation this year? Will we have a fourth year of annoyance? Will we have a second year of shortage? Or will we drop back into the old deadly routine when there is more than the country needs?

Two incidents will probably answer that question, if we take pains to know what those incidents mean.

At the end of the third week in September the operators of the "Pocahontas" district of West Virginia gave a dinner at Bluefield to James B. Neale, the chairman of the Production Committee of the United States Fuel Administration. Before it was held there was a lot of running around the district in automobiles and a lot of exhorting to the miners to work more. At the dinner there was a speech or two which waved the flag and allowed the eagle to scream. But at the finish there was one statement by Mr. Neale which called upon the operators to produce 2,000,000 tons of this coal in October. This compares with a production of 1,410,000 tons in August, which was the largest output in the last two years. This means a gain, demanded, of 42 per cent.

On the same day it was brought out that the Pocahontas district has lost 27 per cent of its miners in the last year and a half, and is not getting more.

The obligation is to increase coal production 42 per cent—on fifteen days' notice—with 27 per cent less miners. And the statement is that this coal is needed to make coke, to move ships, and to satisfy the demands of our allies. Judging by that figure, one would say that a hard winter is ahead.

On the contrary, in the last week in September, one of the shrewdest coal operators in the Mississippi Valley called his men together and said:

"Go out and take every order that anyone will give you for coal for delivery after the 15th of next February. The reason for that order is that every one out this way has an abundance of coal. There are stocks everywhere. But no one has any faith in the railroads. No one believes that the Fuel Admin-

istration really knows what the coal situation is. Therefore, every one will hold to the coal he has until the last minute. When the worst of winter is past they will dig into their stores. Then we cannot sell the coal which we will then be able to produce. I want to sell it now."

These two incidents tell the story. East of Pittsburgh the nation is terribly close to coal rationing. West of the Ohio-Indiana line there is more than enough coal. This looks like faulty distribution. This makes it seem that the zoning system on coal—inaugurated with so much pomp as a saver of transportation—had proved a dismal failure. This seems to point a finger to the Fuel Administration and to say that artificial distribution is no safe substitute for the selective process of free buyers and free sellers. It may do all that, but the thing goes far deeper. One more incident will tell that situation.

When the Steel Corporation was formed it rested its demand for control of the steel market on nothing more than this: "We will have a complete steel mill at the door of every market." A few years later it astounded the steel trade by announcing that it was building one of its largest steel mills on the south shore of Lake Michigan—at Gary, Indiana. No steel man up to then had realized that there was a big steel market in the Middle West. This was a real disclosure. Meanwhile, other steel mills were built or enlarged at South Chicago and Indiana Harbor. There was another steel center at Joliet, Ill. There was a third at East St. Louis. In the same period Chicago built up a tremendous business in the fabrication of "finished" steel. It had an annual business valued at a billion and a half.

Last spring it was announced that 82 per cent of this steel from the Chicago district had been taken for war work. Since then the percentage has grown. But Chicago is not doing the fabricating. It is making more steel than ever, but it is doing less fabricating. The answer is that all the steel is going into the East.

On October 1 there was a meeting of coal men in Chicago. At that time a telegram was read. It had been sent by the Fuel Administration, and said that, apparently, there were less cars in the East than necessary and more cars in the West than were needed. Therefore, until further notice, one hundred coal cars would be taken every day from the West and moved into the East.

No time limit was set upon this diversion of equipment. It is going to continue until somebody says "Stop"—and that somebody may forget to say the magic word or be out of breath when the time comes. At any rate, every day enough cars are being diverted to subtract 5,000 tons of production from Illinois and Indiana and add 5,000 tons of potential production to West Virginia and Pennsylvania.

These two facts, if interpreted as they stand, mean that the Government is transferring raw material and transportation facili-

ties from the West to the East. With that goes also the transfer of business. It is true, literally, that with the raw material and the business have gone and are going the workers. The Government is piling up business in the East by excavating business out of the Middle West.

Meanwhile the transportation lines of the East are not being expanded to carry this additional weight of raw material, of finished product, and of forage for the workers. No new railway lines are being built. Old railway lines are not being extended. No new terminals have been built. Indeed, they cannot be, for the simple reason that the territory is mountainous and new lines are not possible. All passages were availed of years ago. Also, the cities are so congested that new terminals are practically out of the question. That does not seem to have disturbed the Washington officials who are placing the government's orders. They continue to distribute their orders in the East. Those who have charge of labor, coal, and steel continue to try to pour them into that congested district so the munitions can be made.

All such matters have a natural and mathematical outcome. A camel can carry only so many blades of straw. A railroad can carry only so much freight. Pile on more, and you have a breakdown. That is what we are running into. The result is as inevitable as death.

Every man who has enough independence of spirit left to think for himself has seen the consequences of this policy for the last twelve months. He has known that a congestion of business would mean a congestion of the railways. He has known that a congestion of railways would bring—as it always has brought—the destruction of productive capacity. He has realized that the productive capacity of the East coal mines would be killed at the very minute when the reliance of the Army on those Eastern factories was the greatest. He has stood to one side, worrying and cursing, because he was powerless to stop the drift which seemed to be inevitable. It was impossible for the bystander to change the whole machinery of order-placing so that the nation's business would be distributed equitably over the nation, so that the whole people could produce for the Army as well as supply men and money to the Army.

But, while helpless, every man felt a little easier because there was still a surplus of coal production in Indiana and Illinois. Those two states are producing more than ever. The bystander saw that when the Eastern congestion has killed Eastern coal production there was still a chance that the Middle West could come to the relief. They could move some of their coal farther East and limit the suffering at home, even if they could not supply the Army in France with the fighting material it wants.

Now even that faint hope has been taken out of the empty lot and sandbagged. The

cars which gave Illinois and Indiana their larger production are being taken away from the Mississippi Valley and are being crowded into the East to still further increase the congestion there.

Evidently the nation is short of coal for this winter and there is no hope of relief. Three years of practical experience with terminal congestions have not taught the American people a thing. We do not know—even after the heatless days of last January—that congestion kills production, and that the way to avoid congestion is to limit the traffic to the carrying capacity of the lines.

England might have taught us a lesson on that question if we had been willing to learn. She had a transportation problem. It was to get freight across the Atlantic. Rather than haul 7 tons of raw material in order to make a ton of finished steel on English soil, she used her precious ships to haul 7 tons of finished steel made on American soil.

If America had been wise, she would have said that rather than use her limited Eastern railroads to haul raw material she would use them to haul the finished product made, in part at least, in the Middle West.

But a democracy learns slowly. It may learn in time. But that will be too late for this winter. The season's disaster has been manufactured. It is now in transit, and will reach its destination with the first blizzard.

CHEMISTS' CAMP NAMED FOR NOTED MINERALOGIST

By order of the Secretary of War, the Training Camp for the Chemical Warfare Section, now under construction at Lakehurst, N. J., is designated as "Camp Kendrick."

This new camp is named in honor of Professor (Colonel, Retired) Henry L. Kendrick, LL.D., who, after considerable service as a commissioned officer, served as professor of chemistry, mineralogy and geology at the U. S. Military Academy from March 3, 1857, until his retirement from active service, December 13, 1880.

Henry L. Kendrick was appointed a cadet at the Military Academy from New Hampshire, Sept. 1, 1831; second lieutenant brevet, infantry, July 1, 1835; second lieutenant, April 1, 1836; first lieutenant, June 20, 1837; captain, June 18, 1846; brevet major of volunteers, for gallantry and meritorious conduct in the defense of Puebla, October 12, 1847; professor, Military Academy, March 3, 1857; brigadier general volunteers (declined) Sept. 23, 1862; retired as colonel, December 13, 1880, at his own request, having served forty-five years as a commissioned officer, and being over 62 years of age.

He received the degree of LL.D., March 3, 1857. He died in New York City, May 24, 1891. He had no leave of absence from 1863 to 1880.

THOMPSON PRESENTS CASE OF JOPLIN-MIAMI DISTRICT

The contentions of the lead and zinc producers of the Joplin-Miami district in regard to the inequitable portions of the revenue bill were presented to the Senate Finance Committee by A. Scott Thompson, of Miami, Okla. He said, in part:

"What we urge is this, in our amendments, that we object very seriously to the definition of invested capital being limited to the cash paid in for stock and property exchanged for stock not to exceed the par value of the stock. We urge in the amendments offered by Mr. Callbreath that invested capital, not alone in mines but every property, pay the cash put in and the value of the property in the investment.

"I fail to see wherein there is any justification at any time for limiting the value of property to the par value of the stock. We have many small ventures in our district where the capitalization is nominal, not to exceed \$6,000. Yet the property is worth a half-million of dollars, exchanged for the stock.

"Just one point that I wanted to raise with regard to the provision in the war profits provision which allows an old corporation actual pre-war earnings and a new corporation 10 per cent on capital invested. In my field 95 per cent, because of the short life of the property, are new operations. They have all come into production since the war. That is a very unfair discrimination against new corporations, because the old corporation in our field must make a great deal more than 10 per cent.

"We suggest in one of our amendments that new corporations be allowed the same credit that a representative corporation with a pre-war record that was similarly circumstanced secures. Justness requires that they have an equal credit. As a matter of fact, I have figured out in the present bill that all new corporations will fall under the war profits plan.

"Just one other feature that is particularly applicable to my state. Our constitution prohibits corporations owning real property outside of cities and incorporated towns. Just why that was done I do not know, but that is part of the constitution. That makes it impossible for corporations to own real property, own the fee, own possibly a mining lease excepting such as they are actually conducting operations upon. The result is that as the companies grow they are forced to form holding companies to hold their holdings, and then they develop a piece of property, usually not to exceed forty acres, to determine its minerals, and they organize a subsidiary company owned by the same men. I know some very good mines out there, and I

know one organization that has these operating mines separately incorporated, the operating end of it. None of them is organized for more than \$6,000 capital stock, par value—corporations that have paid as high as 6,200 per cent dividends in the last two or three years.

"This bill prohibits the filing of a consolidated return, although that is the original business owned by the same men in the same proportions. This bill at page 61 prohibits the filing of a consolidated return, and we certainly think that the system followed by the department in trying to carry out the present bill should at least be permitted. If, under the definition of invested capital, these operating companies are limited to the par value of the stock, say \$6,000, with an 8 per cent return, which is \$480—"

Senator Jones. Why do they put the capital stock at \$6,000?

Mr. Thompson. Just as a matter of convenience. That stock is not for the market. It was just organized because it was an operating company, and they turned in their property there, that is worth several thousand dollars, for that stock. It seems to me that invested capital should consist of money paid in and property paid in and of course valued as of the day of its transfer.

DRIVE BEING MADE TO GET MORE WORKERS FOR MINES

Through its Mining Division the United States Employment Service of the Department of Labor has opened a drive to secure adequate working forces for the coal and war metal mines of the country.

The campaign will be handled by James Lord, Chief of the Mining Division of the Employment Service, who also is president of the Mining Department of the American Federation of Labor. E. B. Chase, general manager of the Berwind-White Coal Mining Company, of Philadelphia, representing the mine operators, and William Diamond, former statistician of the United Mine Workers and now an officer of the Employment Service's Mining Division.

As the opening step a circular letter, signed by Director General Densmore, is being sent out this week to the secretaries of 3,500 locals of the United Mine Workers in all parts of the United States. Through the use of their transfer card records these secretaries are expected to report to the Mining Division of the Employment Service the names, addresses and present locations of all practical mine workers who to their knowledge have in the past few years left the mines for other work. As soon as the reports of transfers have been received from the miners' locals, the Mining Division of the Employment Service will get in touch with all those who have left the in-

dustry for less important occupations and by means of personal solicitations urge their return to the mines.

Restoration of miners to the non-unionized localities will be carried out through the co-operation of the Fuel Administration, which is placing at the disposal of the Employment Service the facilities of its organization for reaching non-union men who have left the mines for other occupations.

President Wilson's statement that the war program of the nation rests on the shoulders of the miner has focused attention on the present serious shortage of this type of war worker. Over 50,000 members of the United Mine Workers alone have joined the colors since the outbreak of the war. At least an equal number of miners have drifted into other occupations in the same period. This shortage must be made up by restoration to the industry of all qualified miners who have shifted to other occupations during the last few years. Mining is one of the most essential of essential industries and in accordance with the policies of the Department of Labor men must be found for it, even if this means large withdrawals from non-war occupations.

Contact has been established between the Mining Division and mine officials to insure that returning miners will be placed quickly, and for the purpose of directing the men where the need is greatest. The cooperation of the national and district executives of the United Mine Workers has also been enlisted for this service.

In connection with the campaign the following statement is issued by Director General Densmore of the Employment Service:

"The power of our Government and our people to bring the war to a successful conclusion depends in a large measure on the co-operation of the operating companies and the mine workers in stabilizing labor conditions and stimulating production. It is indispensable that labor be conserved in the mining industry. In no case should experienced mine workers retire from the mining industry to follow other pursuits, as it is highly essential by reason of the great demand for coal and minerals that every mine worker stay in the industry."

The Jeffrey Manufacturing Company announces the reopening of its Cleveland branch office, at 437 Leader-News Building, which will be in charge of Messrs. P. C. Dierdorff and C. B. Reed. Both of these gentlemen have had many years of successful sales and engineering experience in the manufacture and application of the Jeffrey products, and are especially qualified to take care of the constantly increasing demand for Jeffrey machinery in their territory, as well as render valuable advisory service to customers in solving their elevating, conveying, crushing, and mining machinery problems.

LICENSE SYSTEM INVOKED TO CONTROL THE TIN TRADE

The War Industries Board is to take control of the domestic pig tin situation under a license system. The following announcement to consumers of and dealers in pig tin is made by T. G. Cranwell, acting chief of the Tin Section of the Board:

"All users and dealers in pig tin will be licensed, and a complete inventory of stocks on hand and contracts unfilled will be made, and, if necessary, supplies will be re-distributed to equalize same according to essential uses. Full details of licensing plan will be announced later."

In accordance with this decision of the War Industries Board questionnaires are being sent out to the 2,000 odd individuals and plants affected calling for the information, under oath, demanded by the inventory. On the facts to be thus gathered as to the actual supply of pig tin stocks and the unfilled contracts, and the manner and quantities in which the pig tin is being held the War Industries Board will decide whether essential uses demand an equalization of such stocks through re-distribution and a matching-up among the plants.

The Tin Section has been informed there is considerable uneasiness in the trade as to control by the War Industries Board of the pig tin situation, and it is the belief of Mr. Cranwell that announcement of positive plans of control will prove beneficial. He says that the control plan will affect only the users and dealers in pig tin, and that the public, which uses tin plate, will be benefited by the licensing system of control.

This action by the War Industries Board was forecast when announcement was made by B. M. Baruch, chairman of the Board, that an inter-allied pig tin pool had been arranged in conferences held in London between the L. L. Summers Commission, representing the War Industries Board, and representatives of Great Britain and other allied nations. Under this pool, which is in the nature of a beneficent monopoly, the world's supply of pig tin is allocated, and distribution is made among the allied countries according to the supply and their needs. The United States will get about 80,000 tons of pig tin, or approximately two-thirds of the world production. The War Industries Board will supervise the allowance to this country. All imports of pig tin, tin ores and concentrates, will be consigned to the American Iron and Steel Institute and will be distributed to the licensees through the United States Steel Products Company. Prices will be regulated by the War Industries Board and will be uniform and at a level that will encourage production in the tin mining countries, which are chiefly Great Britain and the Straits Settlements.

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COAL DISTRIBUTOR'S LICENSE SUSPENDED FOR SIXTY DAYS

The United States Fuel Administration is determined to stamp out, so far as possible, all profiteering on the price of coal. Distributors who are found guilty of obtaining or attempting to obtain prices in excess of that provided for by the government regulation are being dealt with severely.

The United States Fuel Administrator suspended for sixty days the license as coal distributor of W. H. Blight, of 109 East First Street, Elmira, New York. From September 23 to November 22, inclusive, this distributor of coal is absolutely prohibited from transacting business.

In this particular case it was found that the offender wrote on July 8 a letter to prospective customers suggesting that he could get them what coal they needed if they would

pay him an additional twenty-five cents a ton. A copy of one of these letters came into possession of the Fuel Administration and reads as follows:

"I have just found out what is the matter with the soft coal business. People from your part of the country are down through there, paying more for coal than I am, and are getting all the coal. If I could afford to pay \$0.25 above the last price you paid, which was \$3.95 net, making it cost you \$4.20 net, I think I could get you considerable more coal. I am not asking this for myself, for I expect to make my profit on the coal, and it is up to you whether you pay it or not. I am quite positive by giving this \$0.25 or most of it to some of these small operators I can get you considerable coal. The way it would have to be paid you would have to pay for the coal at \$3.85 net and on each bill we will make out a separate bill of \$0.35 a ton salary bill. I don't want you to think this is a hold-up, for if you do, don't bother with it at all, drop it, as I have other big concerns buying of me, who would be very glad of this opportunity, and if you don't want it, of course I will put it up to some of them, for it is a perfectly legitimate proposition, and there is a lot of them paying it, and even more than this."

No evidence was found that the deals proposed by the offending distributor were consummated, so that instead of an absolute revocation of the license it was felt that a sixty days' suspension was sufficient penalty.

No Tin Containers for Candy

Joining in the campaign to save tin, steel and labor for war purposes, candy manufacturers of the country, through the Executive Committee of the National Confectioners' Association, which conferred with Food Administration officials, submitted recommendations for general conservation in the trade.

The committee advised that the use of all metal containers cease, after a period not greater than five months, during which present stocks of tin on hand or in process shall be used up. An exception is to be made in goods destined for overseas shipment to the Army, Navy, Red Cross or similar organization for which specifications require the use of tin containers. The Food Administration was requested to notify the trade.

Approves Metal Conservation Plans

Recommendations looking to conservation of tin, steel, labor and transportation have been approved by the Food Administration.

No item in the grocery list, the resolutions state, shall be packed in containers made wholly or partly of metal, unless it can be shown that the use of metal is essential to the preservation of the food. The change from metal to other containers is to be made as soon as possible, but syrups, oils and molasses are excepted from the provisions of the recommendation.

SMITH & WESSON PLANT COMMANDEERED BY GOVERNMENT

In connection with the announcement by the President that he has approved the taking over of the plant and business of the Smith & Wesson Company of Springfield, Mass., the following statement is authorized by the War Department:

The plant of the Smith & Wesson Company, at Springfield, Mass., manufacturing pistols for the War Department, has been commandeered under Section 120 of the National Defense Act, for the duration of the war and an officer of the Ordnance Department has been placed in charge of further operation of this industry.

This action was made necessary by the refusal of the Smith & Wesson Company to abide by the award of the National War Labor Board, rendered August 22, 1918. This is the only instance of a manufacturer under contract with the War Department arbitrarily rejecting an award by the agency set up by the President for the maintenance of industrial peace during the war.

The War Labor Board's finding in the Smith & Wesson case was made upon a recommendation by Joint Chairman Frank P. Walsh and Frederick N. Judson, acting Joint Chairman in the absence of Mr. Taft. The Walsh-Judson report recommended that the company discontinue, for the period of the war, its practice of compelling employees to sign individual contracts, one clause of which bound the employees not to join a trade union; that the right to join trade unions be extended to the workers and that a system of collective bargaining be established in the Smith & Wesson plant. Under the operation of such a system the workers elect shop committees to represent them in negotiations with the employer on all questions of industrial relations. The demand of the workers for a 25 per cent increase in pay was not conceded in the recommendation, it being stated that the question of wages could best be worked out through the operation of the collective bargaining system. These recommendations were duly approved by the War Labor Board, and it became the duty of the Smith & Wesson Company, as well as its employees, to comply. The workers have indicated their willingness to do so, but the company demurred on the ground that it had not agreed to submit any of its legal rights to the War Labor Board for determination and that to comply with the award would be to abandon methods upon which it had built its business to a high state of efficiency. Further, in its letter rejecting the War Labor Board's findings, it said:

"The Smith & Wesson Company sees no reason why it should abandon its lawful and legitimate method of doing business known and proved by it to be conducive to industrial peace and high efficiency for the fantastic method outlined by the War Labor Board in

its recommendations for dealing with its employees."

A strike at the Smith & Wesson plant involving demands for collective bargaining, the right to join trade unions and the elimination of the individual contract, were the direct cause of government intervention in the controversy between the company and its employees.

The language employed by the company in the foregoing paragraph was held to be calculated to induce other employers to avoid the jurisdiction of the War Labor Board and to defeat the object of the President in its creation, and the company's general attitude toward the reasonable findings of the Board was deemed such as might be expected to disturb industry and to interfere with production.

The recommendations contained in the War Labor Board's findings are in thorough accord with the principles and policies to govern industrial relations for the period of the war promulgated by the President and made the constitution of the War Labor Board. These principles and policies were adopted by duly selected representatives of organized employers and workers of the United States. It is the policy of the War Department to give effect to the decisions of the War Labor Board in all cases coming under the jurisdiction of the Department.

ASKS THAT HAZARD OF OIL BUSINESS BE CONSIDERED

Judge John J. Shea, of Tulsa, gave the Senate Finance Committee the benefit of his study of taxation as applied to oil in an extended statement. Brief extracts from his remarks are as follows:

"I know of a case under the old law where two concerns purchased property in adjoining sections, one concern capitalized at \$20,000 and the other at \$50,000,000, and they purchased exactly the same amount of land, and the \$50,000,000 concern did not pay any tax, under the old law, and the other concern under the law would pay \$600,000. They produced the same amount of oil. Now, these are inequalities. We only complain of the inequality. We do not care anything about the rate of taxation you put on us at all, so long as we can live and get through and keep going and are put on an equality with other industries. We do not want to have our business stopped. In conversation with Mr. Requa the other day—I presume he will be before you; he is the oil man of the Fuel Administration—he said that the result of this tax will be that it will not dry up the source of the oil, but it will result in oil being produced by the larger companies that can spread their losses over the whole field, and the smaller operators will be driven to the wall, and in the happening of the very thing that the Government

has sought to prevent, namely, the gathering of all these great properties into the hands of a few large concerns.

"I am producing oil notwithstanding that I am paying a tax of 80 per cent, and I can drill a new well in a new field and get a lot of oil out of it, but the moment I do that I will immediately have to pay 80 per cent on that new well to the Government, and at the end of the war I will have neither money nor property left. What would be the natural thing for a man to do under those circumstances? He would naturally let the oil stay there. He will not do this under existing conditions because he is going to produce and let the Government have all of the oil that is necessary for its purposes; but they may not be all patriotic enough to do this, and the supply must be kept up and the burden will fall on the most patriotic. We are going to stand for whatever you gentlemen in your wisdom see fit to do; but we do ask that you give consideration to our business in the matter, not for the purpose of escaping taxation, but in order that it may be justly taxed; and in doing that we believe you ought to take into consideration the risk and hazard of the business.

IRON ORE PRICES CONTINUED UNTIL END OF THE YEAR

The President has approved the agreement made by the Price Fixing Committee of the War Industries Board with the representatives of the iron ore, pig iron and steel interests, that the maximum prices now prevailing on iron ore, pig iron and iron and steel products be continued in effect for the three months ending December 31, 1918, with the following exceptions:

1. Lake Superior iron ore.

Base prices of Lake Superior iron ore delivered to lower lake ports are increased 25 cents per gross ton on and after October 1, 1918, subject to the following condition: These increased prices are based on the rail freight rates now in effect and on the present lake rates, and in the event of any increase or decrease in either rail or lake rates said prices shall be increased or decreased accordingly on all deliveries made during the continuance of such increased or decreased freight rates.

2. Pig iron.

The base price on basic iron is increased to \$33 f. o. b. furnace. The base price on No. 2 foundry iron is increased to \$34 f. o. b. furnace. The price of standard Bessemer iron is fixed at \$35.20 f. o. b. furnace. The above prices are subject to the following changes from previous practice as regards delivery:

(a) Pig iron produced in the Virginia, Tennessee, and Birmingham districts and the scattering districts south of the Ohio and

Potomac Rivers, including furnaces at St. Louis, Mo., but not including furnaces bordering on the Ohio River, shall be sold on an f. o. b. Birmingham, Ala., basis.

(b) Pig iron produced in the eastern district, i. e., from all blast furnaces located east of the Allegheny Mountains and north of the Potomac River, shall be sold on an f. o. b. Pittsburgh basis.

(c) Pig iron from all other producing districts or furnaces shall be sold f. o. b. furnace as heretofore.

No new contracts calling for delivery of any of the above commodities or articles on or after January 1, 1919, are to specify a price unless coupled with a clause making the price subject to revision by any authorized United States Government Agency, so that all deliveries after that date shall not exceed the maximum price then in force, although ordered or contracted for in the meantime. It is expected that all manufacturers and producers will observe the maximum prices now fixed.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912

Of THE MINING CONGRESS JOURNAL, published monthly at Washington, D. C., for October 1, 1918.

City of Washington, } ss:
District of Columbia, }

Before me, a Notary Public, in and for the State and county aforesaid, personally appeared E. Russell Coombes, who, having been duly sworn according to law, deposes and says that he is the business manager of THE MINING CONGRESS JOURNAL, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in Section 443, Postal Laws and Regulations printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Name of Publisher—The American Mining Congress. Postoffice address—Washington, D. C.

Officers:

Walter Douglas, President, 99 John Street, New York.

Harry L. Day, First Vice-President, Wallace, Idaho.
M. S. Kemmerer, Second Vice-President, New York City.

George H. Crosby, Third Vice-President, Duluth, Minn.

J. F. Callbreath, Secretary.

Editor—J. F. Callbreath.

News Editor—Paul Wooton.

Business Manager—E. Russell Coombes.

2. That the owners are (give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of stockholders owning or holding 1 per cent or more of the total amount of stock): The American Mining Congress—a corporation, not for profit. No stockholders.

3. That the known bondholders, mortgages, and other security holders owning or holding 1 per cent or more of total amount of bonds, mortgages, or other securities are (if there are none, so state): None.

E. RUSSELL COOMBES,

Business Manager.

Sworn to and subscribed before me this 1st day of October, 1918.

(Seal.)

THOMAS C. WILLIS,

(My commission expires February 20, 1922.)

INDIVIDUAL RESPONSIBILITY PLAN IS OUTLINED

Dr. Garfield in Proclamation to Coal Industry Tells How Each Person Engaged in Coal Mining Must Have Share in Responsibility.

Individual responsibility, applying to every person engaged in the production of coal, is the keynote of a proclamation addressed to all connected with the industry by H. A. Garfield, U. S. Fuel Administrator, setting forth the urgent need of a greatly increased output for the next six months. Mr. Garfield directs attention to the enlarged requirements of the country, due to the necessity of meeting the needs of domestic consumers and keeping pace with the constantly enlarging fuel demands due to the expanding military program of the nation.

The message recognizes the fact that the production in the last three months, in spite of a shortage of labor, has been larger than had been counted on and gives praise to the miners, operators, production managers and all others whose efforts have contributed to that result.

The individual responsibility plan, as outlined by Mr. Garfield applies to every district production manager, to every coal operator, to every mine superintendent and all others engaged in supervising work and, perhaps most important of all, to every man engaged in the actual labor of mining coal. The Fuel Administrator calls for the maintenance of an established set of weekly quotas from now until March 31 next. It is recognized that this is the period when production is most difficult, owing to weather conditions, but this very fact makes it the more imperative that every possible effort be put forth with might and main to keep the supply up to the figures of the weekly quota.

Each mine is called upon to produce its equitable share of the weekly quota. This share is based on present conditions and previous results at that particular mine. Each miner will be expected to mine his proper proportion of his mine's quota.

The necessity for an enlarged supply is particularly pressing in the bituminous fields. The output required of the soft coal mines between now and March 31 next is 12,234,000 tons per week, as compared with a production of 10,503,000 tons per week for the same period of last year. This is an increase of approximately sixteen and one-half per cent.

Anthracite mines are called upon to produce 2,030,000 tons per week as compared with 1,909,000 tons in the same period last year. This is an increase of approximately six and one-third per cent.

These additions to the output, as compared

with last year, are imperatively necessary because of the expanding war program of the nation, and to assure adequate supplies for American factories and American homes. There must be more coal supplied for the next six months, in spite of the increased production in the last three months. Mr. Garfield recognizes the result of enlarged effort during the last three months in these words of praise for the miners and all others connected with the industry:

"I recognize, as you know, that through your patriotic efforts the production of coal during the last three months has far exceeded our earlier expectations."

More coal, still more coal and then more coal on top of all that, is a fair summary of the demands being made upon the Fuel Administration. The heavily enlarged supply must be forthcoming if the fuel needs in connection with America's vast military program are to be met without stinting the allotments for domestic consumption through the winter months.

In the preparation of the working basis for carrying to success the weekly quota plan it is asked that minimum production figures be set for the various mining districts, and the district managers have been requested by James B. Neale, production director, to apportion, in consultation with their local mine committees, the share of each mine in supplying the required tonnage of coal each week.

Officials of the Fuel Administration are confident that every miner will volunteer to produce his proper share each week, this share to represent his equitable proportion of the quota allotted to his mine.

District production managers will take steps to arouse sentiment in coal mining communities to the patriotic necessity of each mine maintaining its weekly quota in the next six months.

Mr. Garfield's message reads thus:

"To all persons engaged in the mining of coal:
"The growing requirements of the nation's military program and the essential domestic demands for the coming winter can be met only by a large increase in the average weekly production of coal during the next six months, as compared with the coal mined during the corresponding period of a year ago.

"The bituminous tonnage between now and March 31 next must average 12,234,000 tons per week, and the anthracite tonnage 2,030,000 tons per week. During the same period last year the weekly production of bituminous was 10,503,000 tons and of anthracite 1,909,000 tons.

"I recognize, as you know, that through your patriotic efforts the production of coal during the past three months has far exceeded our earlier expectations.

"The practical response you have made to the urgent appeals of our production director, Mr. James B. Neale, has been particularly gratifying because the number of miners and

the facilities available have naturally been restricted by other war activities.

"Under the circumstances your increase to date has been splendid, but the figures now show that, if all necessary demands are to be met, the time has come when there must be a further intensification of effort on the part of all of us. In fact, I believe that the time has come for a definite allotment of individual responsibility.

"If each one of us will get under the load, voluntarily carrying his portion of it, there will be no difficulty in reaching our goal.

"The mines are an essential part of the nation's battle line. It is only by attaining our objectives at the mines that we can attain completely our objectives elsewhere.

"I have therefore requested the Director of Production, in consultation with the district managers, production committees, miners and operators, to figure out and establish weekly production quotas for each individual mine quota which, added together, will give us all the coal needed this winter.

"These quotas can be assured only by the definite pledging of each miner to assume his equitable portion of his mine's allotment.

"It will greatly hearten our forces abroad to learn that every miner has volunteered to carry out his part in this definite program and has personally assumed responsibility for a weekly coal production representing his proper individual contribution toward the winning of the war."

Coke Prices Reduced

Reciting the fact that contracts for high-priced coal have generally expired, that the supply of coal is more regular and that the price of coal has been reduced 10 cents a ton, an order has been issued by the United States Fuel Administration making a flat reduction of 30 cents a ton for coke produced in by-products ovens, except in the states of Alabama and Washington.

Under the order, the base price for by-product coke is fixed at \$5.70 for run of ovens and \$6.70 for selected foundry, which is a reduction of 30 cents per ton from the former base price. Except where otherwise provided, the maximum prices, f. o. b. cars at point of production, for each grade of by-product coke shall be the sum of the base price for such grade, and the freight rate from the competing bee-hive coke district which takes the lowest freight rate to the point where such by-product coke is produced.

The order establishes a price for by-product coke in Alabama which takes into account the reduction of 30 cents, and which is made to correspond with the advance in wages due to the advance in the price of coal on May 15. The original classification of coal districts in Alabama caused some confusion in adjusting the prices of

coke. Recently the Alabama coal fields have been reclassified, and the new coke prices for that state are brought into harmony therewith.

The price adjustments were made under direction of the Coke Bureau of the United States Fuel Administration, and have involved a painstaking investigation of an intricate subject. The prices fixed are based on the new prices for coal and the classifications of coal districts in the order of August 22, 1918, with reasonable allowances for conversation, selling, depreciation, contingent reserve and profit.

HOPES TO FORESTALL

SHORTAGE OF KEROSENE

As a precautionary measure to forestall an impending shortage of kerosene during the coming winter, the Oil Division of the United States Fuel Administration has issued the following letter to all refineries throughout the country:

"I am convinced it is absolutely necessary that the kerosene production of the country should be materially increased. Statistically, kerosene is in a more unsatisfactory position than gasoline or fuel oil. We have not heretofore felt the acuteness of this situation because of the summer season through which we have just passed. Now, however, we are approaching the season of maximum kerosene consumption and unless steps are taken immediately to provide increased supply we shall undoubtedly this winter face a shortage much more acute than we have as yet experienced in any of the petroleum products.

"The statistics now in the hands of your sub-committee show clearly the decrease in the percentage output of kerosene by practically all refineries. The situation as a whole shows decrease in barrels produced and a very large increase in domestic consumption which fortunately has been offset by a decrease in exports due to lack of tonnage for overseas movement. This export movement is now increasing, and the winter will soon be upon us. I request, therefore, that you communicate with each refinery, forwarding them a copy of this letter, and urge upon them the absolute necessity of increasing their kerosene production to the fullest extent possible, at least to a percentage amount equal to that of last year."

New Fuel Administrator for Idaho

Fuel Administrator Garfield announces the appointment of C. C. Anderson, a prominent merchant operating a chain of stores at Boise, as Federal Fuel Administrator for the State of Idaho. He succeeds Frank R. Gooding, who, having entered the race in his State for United States Senator, could no longer serve with propriety as a government official.

EIGHT DAYS OF COAL MOVEMENT EQUALS YEAR'S TONNAGE OF WHEAT

P. B. Noyes, Director of Conservation, of the United States Fuel Administration, in an address before the annual convention of the National Association of Stationary Engineers, at Cincinnati, Ohio, said in part as follows:

"It is estimated that the needs of the war call for at least one hundred million tons more coal this year than in 1917 and two hundred million tons in excess of that provided in 1914, the year the war started. As figures this does not sound difficult, but when we consider that this increase must be produced by a lessened man power and a railway system very little improved since the war started and taxed with inconceivably large demands from every war-making department, and when we picture this increase of coal as being four-fifths as much as was excavated during the sixteen years of the building of the Panama Canal, you will realize that we have a problem out of range of any other.

"These war needs must be met by the most intensive work in three directions: first, the increase of production; second, through conservation, through saving in every possible way; and, third, by a distribution system which shall insure against 'lost motion,' which shall fit our cloth exactly to the pattern.

"The Fuel Administration has been putting its most intensive work on increasing the production. This is evidenced by the fact that, while every European country has decreased in coal production since the war began, the United States mined fifty million tons more coal during its first year of war and will increase that by another fifty million tons this year.

"In almost any other line of activity the enterprises and energy of America is looked to to make good, no matter what the figures. Coal alone is of too huge bulk to be increased to any extent quickly. You must remember that 52 per cent of all railway cars loaded with coal, a tonnage equal to the great cotton crop of the United States is moved every 11-3 days, every eight days we are mining and transporting as great a weight of coal as the entire wheat crop of the United States. Our miners go deep into the earth and painfully bring up a tonnage of coal, and our railroads transport it an average of 300 miles every year, equivalent to 2¼ Panama Canals. We have fewer men in the coal mines than two years ago and will mine one hundred million tons more than then.

"The Conservation Bureau has organized, as you know, power, light and fuel conservations, going into every industry in the United States in addition to intensive work on domestic consumption. The figures coming in already are very encouraging. We have set a quota of thirty-five million tons to be saved in the boiler and power houses of

industry and fifteen million tons in the homes. If this can be accomplished, the gap between our increased production and the much greater increase of demand will be filled.

"Distribution is perhaps organized in the Fuel Administration more thoroughly than any other part of the work. Every week the distribution department lays on Mr. Garfield's desk a statement by districts, by states and as a nation, showing the amount of coal produced during the week before in all of the ten thousand or more mines, also a statement of the amount consumed taken from the postal card reports, with which you are familiar; and, lastly, a statement of the amount of coal on hand, adding together the stock piles of every industry and every dealer in the country. With this information the streams of coal can be directed intelligently, shifted from time to time and made to do all the work permitted by the coal mined.

"But in the present crisis of the war with success depending upon steel, and steel depending upon coal, no ingenuity, rules or efficient administration will save us without practically 100 per cent cooperation from the people of the country.

"We sometimes complain that the business men give us only a part of the cooperation we should have; that their attention is still divided by personal interests. I have found, however, in a year's association with the business interests that it is only necessary that men like yourselves should know what we know in Washington—should see the meaning of a shortage of coal for the war as I see it every day in my connection with the War Industries Board, to get a cooperation which will ask only that it be told what sacrifice will really help.

"On March 21 Germany taught the world a new military science—that an overpowering weight of munitions and shells, guns, tanks, aeroplanes, etc., will bring success with a minimum of casualties. Germany got together a supply of all these munitions beyond anything the world had ever seen before. The Allies have profited by this experience. Guns, shells, and everything else contributing to the saving of lives are being forwarded to France in unbelievable quantities. The program is founded on demonstrated fact that if you have shells to waste lives can be saved. From now on it is munitions against casualties.

"If you keep this in mind you will have the background for the sternly drastic attitude of the Government during the next six months in clearing the way for filling Pershing's orders.

"Gentlemen, we are facing a catastrophe. It is not one of those catastrophes which makes such a noise that everyone knows when it happens. It is a silent tragedy. We cannot fill Pershing orders in full because the United States cannot make sufficient steel this winter. A shortage in steel results almost entirely from lack of coal. Keep this in mind and then look forward to the events of the com-

ing spring. We shall have the drive. We shall succeed in it, but some time in February or March, or whenever the time has come, General Pershing will sit down with a pencil in hand, will figure up the exact deficit in the filling of his orders for munitions. With military formulas now well recognized he will figure in place of those munitions how many extra men must be put into the battle to be killed. This is no fanciful statement. It is now possible to treat, in any aggressive movement, the question of munitions or of casualties as interchangeable quantities. So many thousand American youths must be thrown into the hopper for every thousand tons of munitions which are short.

"With this background I know that discussion with any man present of wastage of coal or of coal to be used for any industrial or economic consideration would be very one-sided. You will go just as far as any of us in Washington in urging that no consideration be given to any economic compromise with the coal supply which balances civil prosperity against men's lives.

"This statement of the case sounds tragic, but the worst of it is that it is terribly true, so true that I feel confident if every American business could see the actual facts as they come to us in Washington, there would be no need of regulations or rules, only directions. No man here would spare himself either labor to save the last pound of waste or the sacrifice involved in devoting the fuel and material he needs most to helping to complete the Pershing program."

BUREAU OF MINES' WORK ADDS TO PETROLEUM PRODUCTION

By urging the cementing of oil wells in the North Cushing field of Oklahoma, in order to keep out the detrimental flow of water, experts of the Bureau of Mines, Department of the Interior, have succeeded in increasing the production of oil from fifty wells more than 2,000 barrels a day.

Aside from the commendable saving of 2,000 barrels of oil each day for war uses, this lesson in practical conservation will add \$4,500 a day to the operators' gross income, and if the increased oil yield continues for one year, a not over-sanguine expectation, there will be an addition of more than three-quarters of a million barrels of oil for war purposes and \$1,640,000 more in the pockets of the operators.

It is estimated by A. A. Hammer and V. L. Conaghan, the Federal oil and gas inspectors for Oklahoma, who have charge of this campaign, that the total cost of excluding the water from the fifty wells was \$10,000, which means a return of about \$165 for each dollar invested.

Secretary of the Interior Lane, commenting on the report from the field, said: "This is the kind of practical conservation that counts

heavily just now. It not only is saving from waste one of the most precious natural resources with which this country is blessed, but is also supplying much needed fuel for the Army and Navy. At the same time it is paying the operators handsomely to increase the flow of their wells.

"It happens that the crude oil from Oklahoma contains much gasoline. An increase of 2,000 barrels of crude oil a day means 500 barrels of gasoline a day, or more than 7,500,000 gallons in a year's time. This saving alone, from this restricted field in Oklahoma, is sufficient to drive every automobile in the United States an average of twenty miles, and there are five and a half million automobiles in the country.

"The best of it is, this is but the beginning of an enormous saving of crude oil by keeping the water out of the wells. It has taken the bureau two years to demonstrate the feasibility of using cement in the Oklahoma wells, but now that such a saving can be effected it is being adopted by all progressive oil men. I understand that the bureau has already started a campaign in the Healdton field, Oklahoma, and that, while it has not yet received a report of the actual results, it is estimated that the saving in this field amounts to more than 300 barrels of crude oil a day. In Illinois the same plan is being introduced, so that the Bureau of Mines is confident that the total savings to the country will be considerable and will go quite a distance in supplying our urgent war needs.

"In normal times, without a war for civilization on our hands, we would hail the men who are accomplishing this as benefactors of mankind."

MINERS AND OPERATORS GETTING CLOSER TOGETHER

Soft coal production is climbing. While the United States, as a whole, is not yet up to the output which is needed to carry on war work and civil life at the desired speed, the tonnage is steadily getting closer to the mark set.

According to M. D. Edmonds, who is assisting James B. Neale, director of production, United States Fuel Administration, the coal output is growing because miners and employers are working in closer harmony for one purpose—greater production of clean coal. The Bureau of Production, United States Fuel Administration, has worked out a system of production committees to be established at each mine. In brief, this system contemplates a mine committee, representing both workers and employers, who will spur the laggards and learn why men are idle when they should be working. The plan is designed to be purely one of exhortation, example and moral suasion, and even partial tests are already proving its soundness.

TRUE PATRIOTS WILL REPORT FOR WORK EACH DAY, SAYS NEALE

At a large meeting of operators, mine managers and mine workers, held at Greensburg, Pa., September 21, James B. Neale, Director of Production, United States Fuel Administration, spoke, and, among other things, he said:

"The essence of maximum coal production is efficiency, and this cannot be had without hearty cooperation between the mine workers and the mine management. Each group must do its best along its own well-defined lines, but it must also strive to help the other, both by actual deeds and by pointing out ways for improvement. Suggestions and constructive criticism must be given and accepted in a true spirit of cooperation and with no thought of anything save increased production.

"If the men making up the mine management are true patriots, they will be only too glad to know wherein they have failed to do their full duty in providing ways and means for maximum output. They will accept cheerfully criticisms and suggestions from anyone who is in a position to know what the actual conditions are, and they will do their utmost to remove every abstacle which may prevent any worker from working eight hours each day in the most efficient way possible. Too often tonnage is lost due to neglect or carelessness concerning which the mine management has no knowledge. Such things should be brought to the attention of the proper officers, and they should be glad to have their attention called to them so that corrective measures may be taken. No wise, loyal superintendent or foreman will resent having facts regarding bad conditions brought to him, but, on the other hand, he should be grateful to have knowledge which will enable him to more effectively do his part in the great struggle now going on in France.

"If the men making up the body of mine workers are true patriots, they will report for work each working day, and will do their utmost to increase production. They will take great care to see that they neglect nothing which will create an obstacle to their own work or to the operation of the mine in general. Too often tonnage is lost through the failure of one or more workmen to carry out promptly and properly the instructions given him. Production depends not only upon a well-thought-out plans and proper orders given, but also upon the proper execution of these plans and orders. The mine management can order a branch laid or cars and timber delivered, but it cannot do all of the work itself, and so is helpless unless each workman performs his duty.

"Now as never before we must have a

hearty spirit of cooperation between the management and the men. Personality, petty spites and jealousies must disappear, and in their place there must spring up such a love of country and such a determination to win the great war for righteousness as will sweep aside all obstacles and will produce sufficient coal to meet every need. This is not the United States Government's war alone; this is not President Wilson's war alone; but it is also your war and my war. We have sent and are sending our boys to France, and we must provide them beyond question with everything which they need.

U. S. DYESTUFFS INDUSTRY HAS REMARKABLE SUCCESS

The remarkable success of the American chemists and chemical manufacturers in developing the dyestuffs industry, when the supplies of dyes from Germany were cut off, is strikingly shown in a report just issued by the United States Tariff Commission entitled, "Census of Dyes and Coal-Tar Chemicals, 1917."

At the outbreak of the European war, Germany dominated the world's trade in dyes and drugs derived from coal-tar. Before the war, seven American firms manufactured dyes from imported German materials. In 1917, one hundred and ninety American concerns were engaged in the manufacture of dyes, drugs, and other chemicals derived from coal-tar, and of this number, eighty-one firms produced coal-tar dyes from American materials which were approximately equivalent in total weight to the annual imports before the war. The total output of the one hundred and ninety firms, exclusive of those engaged in the manufacture of explosives and synthetic resins, was over fifty-four million pounds with a value of about sixty-nine million dollars.

Large amounts of the staple dyes for which there is a great demand are now being manufactured in the United States. A few of the important dyes, such as the vat dyes derived from alizarin, anthracene, and carbazol, are still not made. The needs of the wool industry are being satisfactorily met than the needs of the cotton industry.

The report gives in detail the names of the manufacturers of each dye or other product and the quantity and value of each produced, except in cases where the number of producers is so small that the operations of individual firms would be disclosed. Seventeen hundred and thirty-three chemists or engineers were engaged in research and chemical control of this new industry, or 8.8 per cent of the total of nineteen thousand six hundred and forty-three employees. The report also contains an interesting account of the history and development of the industry since the outbreak of the European war.

ALLIES AGREE ON POOLING PLAN FOR SUPPLY OF PIG TIN

Under an inter-allied pooling agreement reached by representatives of the United States, Great Britain, France and Italy at conferences held in London, which were attended by L. L. Summers, member and technical advisor of the War Industries Board and George Armsby, Chief of the Tin Section, each country participating in the conference will get its needed supply of pig tin. The action amounts to an international monopoly of a beneficent nature.

The plan of distribution worked out allows the United States about 80,000 tons of pig tin or two-thirds of the world's entire production annually.

With the War Industries Board supervising the allowance to this country all imports of pig tin, tin ores and concentrates will be consigned to the American Iron and Steel Institute which will receive, pay for and distribute the metal to the industry through the United States Steel Products Company.

The price will be regulated by the War Industries Board and will be uniform to all consumers of ten tons of pig tin or over. There will be another uniform price for users of less than ten tons. These prices will be maintained at a level which will encourage production in the tin mining countries—Great Britain and the Straits Settlements chiefly—and stop profiteering. Prices, rules and regulations will be announced later. It is probable that users and dealers may be licensed.

The War Industries Board believes there will be insured by these arrangements a steady supply of materials at a stable and reasonable price. Since the negotiations for the pooling arrangement began in London six weeks ago, the price of pig tin has fallen steadily. The quotation on September 6 last showed a net decrease of 14 cents per pound as compared with the price on July 15, 1918.

That there may be a sufficient supply of tin in the United States to meet the war needs and to supply essential civilian uses, vigorous plans for conservation of the metal are being made effective through cooperative efforts by the War Industries Board and by the Food and Fuel Administrations in the enforced substitution of other than tin for containers, wherever that is possible. Tin container manufacturers have agreed with the War Industries Board in plans that will curtail their use of tin plate 30 per cent, which means a saving in the next three months of about 150,000 tons of tin plate.

The Food Administration is working out a tin conservation plan with various industries, including lard and lard compound packers, wholesale grocers, cracker manufacturers, tea and coffee packages, cocoa and chocolate manufacturers and baking powder manufacturers. All have been urged to substitute fiber, paper or other containers where possible.

The Fuel Administration has taken up the subject with the oil dealers and the War Industries Board is working along similar lines with the tobacco manufacturers and all industries in which tin is used in turning out the finished product.

McADOO SAYS SAFETY IS AN IMPERATIVE NECESSITY

Director General McAdoo sent the following message to the National Safety Council Congress, which met in St. Louis:

"Conservation of the lives and health of our people is an imperative national necessity. To arouse leaders of all industries and to awaken all workers to this necessity is a work of vital importance. The old maxim, 'The safety of the people is the highest law,' has new importance in these days of human wastage. Never before have enlightened men realized the world importance of safeguarding in a higher degree than ever before the broad interests of human beings and the right of all, even the humblest, to live in freedom and in security, not only from oppression, but also from injury resulting from controllable causes. Your organized influence and your vigorous work for the protection of the lives and the safety of economic workers has the complete endorsement of all far-seeing men. Today man power means so much to the safety of the nation that the conservation of the health and the promotion of safety, not only of the workers on our railroads, but in all industries, stands as a patriotic duty as well as an economic necessity. Effective accident prevention work on all railroads under Federal control is, therefore, one of the important activities of the United States Railroad Administration. Please be assured of my earnest interest and sympathy in the important work you are doing and of my best wishes for a fruitful outcome of your deliberations."

GAS AND OIL INDUSTRIES PLACED UNDER LICENSE

The President's proclamation of September 25, governing licensees engaged in the business of importing, manufacturing, distributing and transporting crude oil, fuel oil, gas oil, kerosene, gasoline and natural gas, requires those engaged in the oil and natural gas industries to secure a license on or before October 1, 1918.

The Fuel Administration appreciates that in some cases it will be physically impossible for the required application to be made and the license to be issued prior to that date. Accordingly, it is announced that in all cases where application for license is promptly made, the applicant may continue his business pending final action by the Fuel Administration upon the application.

ONLY 10 PER CENT OF VALUE OF PETROLEUM IS RECOVERED

In view of the growing importance of gasoline and fuel oil in carrying on the industrial and military activities of the United States and its allies, a comprehensive survey of the petroleum situation will meet a widespread interest. The United States National Museum, Smithsonian Institution, has just issued a 74 page bulletin on this subject entitled "Petroleum: A Resource Interpretation," by Chester G. Gilbert and Joseph E. Pogue of the Division of Mineral Technology. This bulletin, which is freely illustrated with photographs and diagrams, gives a rounded view not only of the petroleum resource, but of the petroleum industry by means of which petroleum products are brought into use. The rapid exhaustion of the unmined supply of petroleum, the war needs for petroleum products, and the national importance of maintaining into the future an ample supply of motor fuel, are weighed against the limited nature of the resource and the wastes inherent in its present type of exploitation, and a plan is suggested whereby this vital resource may be conserved by full utilization, with a gain in the service that petroleum may be made to yield. The subject matter is presented in a readable, non-technical form and is designed to enlist the interest of the public in one of the important resource problems of the day.

Mineral resources are coming more and more into prominence as the basis upon which modern advance is built. Their adequate development is a matter of the first importance, and public opinion will be called upon in increasing measure to shape the course of advance in this fundamental field. Petroleum is of peculiar value to society because it is the sole source of gasoline, the dominant motor fuel; provides kerosene, the most important illuminant outside of cities; and yields lubricating oil, upon which the wheels of industry revolve. In addition, it has come to be an essential fuel in the far west, where coal is lacking; is requisite to the operations of an oil-burning navy; and forms the starting point for an oil by-products industry, a branch of chemical manufacture still in its infancy and offering unlimited possibilities of development. In fact, it would not be an exaggeration to say that oil by-products represents one of the foremost industrial opportunities that confront the American nation today.

The petroleum resource stands out because of its limited size and decreasing availability, the growing importance of its products, and the notoriously high percentage of waste involved in its mining. According to conservative estimates, scarcely 10 per cent of the resource value is recovered under present conditions, while the unmined supply now available in the United States is only about

70 barrels to the person. The presence in this country of extensive deposits of oil shale removes the danger of early physical exhaustion in respect to oil, but it does not necessarily insure a deferment of the period of economic exhaustion which is being prematurely rushed into the present by the current wasteful use of the limited petroleum resource.

A limited number of these bulletins are available for free distribution upon application in writing to the United States National Museum, Washington, D. C.

CLEARFIELD CORPORATION GETS OUT ADDITIONAL PRODUCTION

Definite progress has been made by the Clearfield Corporation in getting out the extra coal, which means extra shells and guns for the army in France. In May the output per day per miner employed was 4.30 gross tons; in June it was 4.80; in July, 5; and in August, 5.81, an increase of more than a ton and a half per day per miner employed. These figures were gathered on the ground by M. D. Edmonds, of the Fuel Administration staff.

This gain is due almost entirely to better attendance at work, for the tonnage per day per miner at work has not advanced much. In May it was 6.04 tons; in June, 6.10; in July, 6.20; and in August, 6.23. In other words, the gain is not due to the individual man exerting himself more; it is due to more individuals exerting themselves. The answer is seen in the company's output figures for May as compared with August. In May there were 905 miners employed and the output was 109,548 gross tons. In August the number of miners employed had sunk to 807, a loss of more than ten per cent, yet the output was 123,661 gross tons, a gain of more than twelve per cent.

At this point it might be well to introduce John Gulliver, coal miner and practical patriot. He is employed at the Pleasant Hill mine of the Clearfield Corporation and is within the age limit of the amended draft law. If he were to be taken in the army and were to fight like he works the Kaiser would certainly know it before long.

For John Gulliver has been turning out almost double the average daily tonnage per miner working. It is no flash in the pan, for he has been doing it right along for more than three months. The daily average per miner working is 6.23 tons, according to August figures, but in June Gulliver loaded 270 tons, or a daily average of 10.40 tons. In July he loaded 288 tons, an average of 11.70, while in August he sent out 297 tons, a daily average of 11. It is true he may have a better place than some other miners, and that a new place may cause his average to fall, but his case is interesting as showing the possibilities of greater production by the individual, just as the production committee idea has brought about greater output from mine organizations taken as a whole.

**D. W. BRUNTON PLACED IN CHARGE
OF BOARD'S WASHINGTON OFFICE**

The Naval Consulting Board has opened a Washington office in Room 3547, new Navy Building, completely fitted out for handling all communications and inventions, all of which should be sent to this office. The office of the chairman and secretary will still be in New York, but the new working office here will be in charge of David W. Brunton, one of the present members of the board, and the force will consist of two of the present members and several well-known scientists.

Oil Consumption Increases

The moderate loss in the quantity of petroleum moved from wells and field storage tanks, charged in July to the Gulf Coast field, was more than offset by the gain credited in that month to the other fields listed, and the consequence was a net gain of 2.5 per cent compared with June, 1918, and of 2.4 per cent compared with July, 1917, according to J. D. Northrup, of the U. S. Geological Survey.

Additions in July to stocks of Central and North Texas, North Louisiana, and Rocky Mountain oils were decidedly insufficient to offset current drafts on the surface reserves of Eastern Oklahoma-Kansas, and Gulf Coast oils as a consequence of which there was a net depletion of stocks in excess of 3,000,000 barrels during the month. In the fields to which this summary relates the net depletion of stocks since July 31, 1917, has been about 21,000,000 barrels.

The quantity of oil apparently consumed in July was 10 per cent greater than in June, 1918, and 17 per cent greater than in July, 1917.

Conduct Probe in Coal Fields

Agents of the Bureau of Labor Statistics of the U. S. Department of Labor who have been examining into the wages prevailing in anthracite coal mines and in other industries in or near these coal fields have almost completed their work. Meanwhile data regarding the wages paid by the railroads, munition plants, and soft coal operators, and competitive industries, are being rapidly gathered and put into form for comparison. The results of these investigations are to be used in the adjustment of wages in the coal mining industry.

Labor-Saving Devices in Mines

A committee has been formed consisting of Grant Hamilton representing the Department of Labor; George J. Salmon, Bureau of Mines, and S. A. Taylor, representing the Fuel Administration, to investigate mechanical labor-saving devices relating to mining.

D. D. Hoag, of Joplin, Mo., is in Washington.

Movement May Spread Westward.

It has been frequently asked if the gasolineless Sunday request would be extended to include the territory west of the Mississippi River.

Mid-continent refiners are now canvassing the situation with a view of determining their ability to care for the Western territory and at the same time furnish the amount of gasoline they have agreed to deliver at Atlantic seaboard.

The solution will rest entirely upon their ability to provide for both demands. If this is found to be impossible, the country west of the Mississippi will be called upon to forego Sunday pleasure-driving temporarily, in order that the necessary stocks may be built up and maintained upon the Atlantic seaboard for shipment overseas.

Price Allowances on Deliveries.

Railroad companies delivering coal to consumers by order of the United States Fuel Administration for the purpose of relieving emergencies will be allowed to add to the cost of such coal an amount to cover extra switching, handling and accounting.

The order provides that the railroad may receive from the consumer or retail dealer to whom coal is so delivered the cost of the coal, including lawful transportation charges from point of origin to destination, and the additional sum of fifteen cents per net ton, or such greater additional sum as may be agreed upon by the railroad company and the consumer or dealer. In case of failure to agree on a settlement beyond the allowances specified, the Bureau of Prices of the United States Fuel Administration will determine and adjudicate such differences as may occur.

Making Study of Gasoline Costs and Prices

Concerning the report that the Fuel Administration is contemplating the fixing of the price of gasoline throughout the country, Mr. Garfield stated that a study is being made of costs and prices, and that on the basis of this investigation it is expected shortly to effect such a readjustment of prices as may be found to be reasonable and necessary.

In order to provide increased facilities for manufacturing the pneumatic rotary pump and other mining specialties, the Wood Equipment Company has recently purchased and equipped commodious shops at Grand Crossing, Chicago. The main offices will be located at that plant, and the company will continue to maintain a city office in the McCormick Building, Chicago, as well as branch offices in New York, Pittsburgh, Knoxville, and Denver.

CHAIRMAN BARUCH EXPLAINS WHY BUILDING HAS BEEN RESTRICTED

For the first time since its organization the operations of the War Industries Board have been called into question as to the source of authority under which they proceed.

Senator Calder of New York, offered a resolution adopted by the Senate on September 11, calling upon the Board to make this explanation, but confining the scope of his inquiry to "all orders relative to the construction and alteration of public or private buildings."

Bernard M. Baruch, chairman of the War Industries Board, made the reply which was presented in the Senate.

Senator Calder's resolution, his comments thereon, and Mr. Baruch's reply follows:
From Congressional Record of Sept. 12.

Mr. CALDER. I submit a resolution and ask unanimous consent for its present consideration.

The VICE-PRESIDENT. The resolution will be read.

The resolution (S. Res. 304) was read, as follows:

Resolved, That the War Industries Board be directed to transmit to the Senate all orders promulgated by that Board relative to the construction and alteration of public or private buildings, and to advise the Senate under what authority of law said orders were issued.

Mr. CALDER. I introduce this resolution because articles appearing in the newspapers within the last day or two indicate that the War Industries Board has promulgated orders which, in effect, will completely destroy the building industry of the country. The building material industry of the country has an investment of \$4,000,000,000 in their business, and the new buildings constructed in the nation in the last pre-war year—1916—totaled \$1,800,000,000. As I understand these orders, they prevent the construction of a barn, a silo, or even a private dwelling house or of any building of a private character without the permission of the Federal Government. If it be necessary in order to win the war to destroy this great wealth and tax-producing industry, of which it seems to me there can be few more essential, we ought to know it and the reasons for it; and the people must adjust themselves to it; but if this great business can be saved, at least in part, some way should be found to do so.

I ask unanimous consent that the resolution of inquiry be now considered.

The resolution was considered by unanimous consent and agreed to.

Sept. 19, 1918.

(Reply of the chairman of the War Industries Board).

To the Honorable the President
and Senate of the United States,
Washington, D. C.

Gentlemen:

On behalf of the War Industries Board, I beg to comply with Senate Resolution 304, passed September 13, 1918, and transmitted to me the same day.

1. The only order promulgated by the War Industries Board "relative to the construction and alteration of public or private buildings," is contained in Circular No. 21 issued September 3, 1918, and supplemented under date of September 10, 1918. Copies of the order and the supplement are attached hereto.

2. Said orders were issued under the authority conferred upon the War Industries Board and its Chairman, by the President of the United States, in a communication to the Chairman, dated March 4, 1918, and confirmed by Executive Order dated May 28, 1918, whereby the War Industries Board was created a separate administrative agency of the President, with powers, duties and functions set forth in the said communication from the President of March 4, 1918. Copies of said communication and of said Executive Order are attached hereto.

I beg to call particular attention to the following powers and duties thus specifically conferred by the President upon the Board and its Chairman:

a. "The studious conservation of resources and facilities by scientific, commercial and industrial economics."

b. "The determination, wherever necessary, of priorities of production and of delivery and of the proportions of any given article to be made immediately accessible to the several purchasing agencies when the supply of that article is insufficient, either temporarily or permanently."

c. The Chairman's duty to guide and assist "in obtaining access to materials in any way preempted," and "to anticipate the prospective needs of the several supply departments of the Government and their feasible adjustment to the industry of the country as far in advance as possible, in order that as definite an outlook and opportunity for planning as possible may be afforded the business men of the country."

I refer also to the Act of Congress of August 10, 1917, known as the Priority of Shipment Act.

3. In further response to Senate Resolution 304, permit me to add:

In carrying out the duties, with which we were thus charged by the President, the War Industries Board and its Chairman found the following situation to exist with respect to building and construction facilities and supplies:

a. Iron and steel are a necessary part of every completed building. They are necessary for plumbing, heating, ventilating, piping, hardware and mechanical equipment. The direct and indirect war needs of this country and of our Allies for the last six months of the current year already exceed 21,000,000 tons and the country's total output for the first

six months was less than 17,000,000 tons. The unavoidable result is that iron and steel cannot be used for non-war or less-essential purposes.

b. The United States Fuel Administration, finding that the production of building materials consumed upwards of 30,000,000 tons of fuel per annum, and that there was a shortage in the fuel necessary for our war program, curtailed very materially the fuel allowed for building materials. The continued production of building materials for non-war and less-essential projects would now necessarily be at the expense of productions which our war program requires.

c. The Railroad Administration finds that 25 per cent of the total tonnage moved by the railroads is building material. It is absolutely essential that the portion of this tonnage which represents materials not needed for war or essential purposes should be displaced by tonnage which is.

d. The United States Employment Service finds that there is an acute shortage in the labor needed for the war program. It is absolutely essential that labor which may now be idle, or which may be engaged on non-war or less-essential work, should be employed upon work which will contribute towards winning the war.

It is, therefore, evident that the building and construction field furnishes an instance calling imperatively for the exercise by the War Industries Board of the duty, with which the President charged it, of conserving the resources and facilities of the country for war purposes, of determining necessary priorities in production and in delivery, of obtaining access to materials in any way preempted and of anticipating prospective war needs.

It is clear that there is not enough iron, steel, transportation facilities, fuel and labor to supply the direct and indirect war needs of the country and the non-war needs also, and that the resources and facilities used in non-war and less-essential building projects can only be applied thereto by taking them from the war needs.

The inevitable result of this would be failure to supply the war requirements of the country as they are needed. It would mean that non-war and less-essential needs would be produced at the sacrifice of war needs, with the consequent postponement of the day when the war will end and when American lives will be freed from the hazards of battle.

The attached orders were promulgated by the War Industries Board as a necessary means of avoiding this unhappy result.

These orders were only issued after the nearly six months' warning given by the resolution of March 21, 1918, which is quoted at length in Circular No. 21.

Attention is also called to the fact that before Circular No. 21 was issued numerous conferences were held between the Board and the manufacturers of the principal building materials. The latter appreciated fully the sit-

uation as briefly outlined above, and heartily agreed to cooperate with the Board in carrying into effect the spirit of the resolution of March 21, 1918, and, to that end, to enter into the pledge set forth in Circular No. 21.

The manufacturers, however, felt that, not having the country's war program before them, it was impossible for them to determine what building projects were essential and what were less essential. They felt that the War Industries Board should determine this question as definitely as possible, and should pass upon doubtful cases for them.

Accordingly, the Board did determine what were essential projects, defining them in paragraphs number (1) to (5), inclusive, of Circular No. 21, and projects of this character may proceed as therein explained. Other building projects are not prohibited, but may likewise proceed if the local Council of National Defense, which is primarily the body best fitted to judge, finds them in the public interest or essential, and if this finding is approved by the War Industries Board. Building projects which do not measure up to these standards must be deferred until the war program is fulfilled. If they are not, the due fulfillment of the war program will be impossible.

The orders referred to are very much in the interest of the public, because they will prevent the public, including the trade, from planning or undertaking building projects, and then, after plans or commitments have been made, finding that the war program makes it impossible to secure the materials necessary to complete them.

Moreover, the trade itself will find that because of the enormous housing and other construction work which the Government itself is undertaking, a large part of the trade's facilities will simply be transferred to new lines of building activity.

Finally the operation of the selective service acts will, much more than has already been the case, directly affect the amount of labor available for the building trade and for other industries. Even with increased efficiency and female labor, the natural outcome of this condition must be to curtail and reduce the volume of any given business not connected with the war program. As far as it is possible to do so, the less essential industries are being converted to more essential activities, but there will be a certain percentage of these industries which cannot be so converted. Therefore the volume of business in the less essentials will be reduced, and with this reduction there will come a corresponding reduction in taxability.

It is not only the policy, it is the clear and simple duty of the War Industries Board to see that the war program of the country is met, and this program must be met now, when its needs are upon us. This duty must be fulfilled, even if its fulfillment entails industrial loss in this country, as it does human loss abroad.

FUEL ADMINISTRATION REVISES ITS STORAGE REGULATIONS

The U. S. Fuel Administration announced September 14 a revision of the regulations governing the storage of coal by consumers listed on different preference schedules. This revision brings the practical distribution of coal into line with the statistics of production and consumption in different districts as developed during the past thirty days.

With the present very complete information coming to the Distribution Division of the Fuel Administration and showing exactly the production, consumption and stocks on hand in every district, it is possible not only to change where necessary certain movements of coal, but the accumulation of winter storage, which is at this time the most important element of distribution, can be made to play a very important part in getting maximum production and utilizing all available transportation most efficiently. Each week the Distribution Division has before it accurate figures showing the production of every mine during the week previous, also the consumption by all consumers and the accumulation of stocks on hand. If coal is taken into storage wherever possible in each district along the lines laid down by the regulations, it will militate to the advantage of both consumers and producers.

The amount of storage allotted to each district will be altered from time to time as may be necessary to carry out the plans of the Distribution Division for the coming winter.

This plan is designed to obtain the utmost from our transportation equipment with the least danger of any district being out of coal next winter on account of its distance from the mines.

Consumers on the preference classes recently defined by the War Industries Board are permitted to accumulate reserve stocks of bituminous coals as follows:

Maine, 135 days.

Massachusetts, Vermont, New Hampshire, Northern New York, 105 days.

Connecticut, Rhode Island, Southwestern New York, 90 days.

Southeastern New York and New Jersey, 60 days.

Delaware, Eastern Pennsylvania, Maryland, District of Columbia, Virginia, Florida and Western Ohio, 45 days.

Western Pennsylvania, West Virginia, Eastern Kentucky, Eastern Ohio, 35 days.

Lower Michigan, 90 days.

CONSUMERS IN CLASS 2

Maine, 120 days.

Massachusetts, Vermont, New Hampshire, Northern New York, 90 days.

Connecticut, Rhode Island, Southwestern New York, 75 days.

Southeastern New York and New Jersey, 50 days.

Delaware, Eastern Pennsylvania, Maryland,

District of Columbia, Virginia, Florida, Western Ohio, 40 days.

Western Pennsylvania, West Virginia, Eastern Kentucky and Eastern Ohio, 30 days.

Lower Michigan, 75 days.

CONSUMERS IN CLASS 3

Maine, 105 days.

Massachusetts, Vermont, New Hampshire, Northern New York, 75 days.

Connecticut, Rhode Island, Southwestern New York, 60 days.

Southeastern New York and New Jersey, 40 days.

Delaware, Eastern Pennsylvania, Maryland, District of Columbia, Virginia, Florida, Western Ohio, 35 days.

Western Pennsylvania, West Virginia, Eastern Kentucky and Eastern Ohio, 30 days.

Lower Michigan, 60 days.

CONSUMERS IN CLASS 4

Maine, 90 days.

Massachusetts, Vermont, New Hampshire, and Northern New York, 60 days.

Connecticut, Rhode Island, Southwestern New York, 45 days.

Southeastern New York and New Jersey, 30 days.

Delaware, Eastern Pennsylvania, Maryland, District of Columbia, Virginia, Florida, Western Ohio, 30 days.

Western Pennsylvania, West Virginia, Eastern Kentucky and Eastern Ohio, 20 days.

Lower Michigan, 45 days.

Consumers not on the preference list are limited to the following stocks:

Maine, 45 days.

Massachusetts, Vermont, New Hampshire, and Northern New York, 30 days.

Connecticut, Rhode Island, Southwestern New York, 20 days.

Southeastern New York and New Jersey, 20 days.

Delaware, Eastern Pennsylvania, Maryland, District of Columbia, Virginia, Florida, Western Ohio, 15 days.

Western Pennsylvania, West Virginia, Eastern Kentucky and Eastern Ohio, 15 days.

There is no restriction on the stocks of screenings which may be accumulated by either preference or non-preference consumers in Ohio or Lower Michigan, nor is there any restriction on the stocks of Indiana, Illinois or western coal, which consumers may obtain.

Supervision of the accumulation of stocks in accordance with these limits will be exercised by the several State Fuel Administrators, who are authorized to make exceptions where special conditions make it necessary.

A. Scott Thompson, chairman of The American Mining Congress committee on mine taxation, has returned to Washington after spending several days at Miami, Okla. and Joplin, Mo.

BUREAU OF MINES ACTIVE IN INVESTIGATION OF WAR MINERALS

The necessities of the war situation have stimulated in many ways to greater activity the functions of the Bureau of Mines, Department of the Interior, whose normal field covers the production of metals and minerals and joins that of the War Industries Board, which is concerned with manufactures and supplies and prices of raw materials for the same. Much of this increased activity has fallen to the war minerals investigation branch of the Bureau of Mines, provided for by special Congressional appropriation. Under this branch most of the special war activities have been grouped.

In the field of actual mining and milling numerous field engineers have been active, and the policy has been adopted of having these men afford immediate help in the way of advice as to correct mining and milling methods, where this advice is needed, and also regarding all other mining and marketing problems. A great volume of work has been done along these lines, which has made for greater efficiency in production, and which is not intended to form part of any special study or memoir.

In the various Bureau of Mines experiment stations special problems of ore treatment have been and are under investigation. Satisfactory experiments in the concentration of the western chrome ores have been made at Seattle, and experiments on the west Texas sulphur ores show their probable amenability to the flotation method. These are only examples of numerous investigations on milling methods, which cover manganese, graphite, and other war minerals.

Laboratory investigations, with the view of increasing the supply of electrodes, so as to make them available for western electric furnaces, are under way in Colorado.

The subject of the production of chromite has been thoroughly investigated by field parties in all parts of the country, and in addition the Bureau of Mines' engineers have investigated Newfoundland and Cuba, the latter in conjunction with the United States Geological Survey.

The war minerals investigation organization has provided for handling the questions of priorities, both of railroad transportation and of supplies and fuel, and a very large number of applications have been handled. The bureau has also had to act as adviser to the Railroad Administration as to the construction of short lines designed to tap mines, the problem being as to whether such construction was a war necessity or could be postponed.

Similarly, the Bureau of Mines has acted as adviser in mining matters to other government organizations. It has acted as the

advising engineer of the Capital Issues Committee of the War Finance Corporation as to whether proposed issues of mining stock were essential to carrying on the war or could be postponed. It has also worked in cooperation with and acted as adviser to the War Industries Board, especially in certain matters such as pyrite, sulphur, and sulphuric acid, tungsten, etc., and in the decisions and measures taken by the board on these subjects, it has played an important part.

The bureau has in some cases undertaken the difficult problem of highway construction where this was necessary as the outlet for an important war mineral, and in the case of the important discoveries of chromite in Siskiyou county, California, the efforts of the bureau, working through the Forest Service, the Office of Public Roads, the local county government, and the operators themselves, succeeded in promptly starting the construction of the necessary highway.

The labor section of the war minerals investigation has proved a useful undertaking, and is cooperating with the Department of Labor, and in general handles the whole subject of mining labor in that connection. In many cases labor difficulties to which important war mines were submitted as a result of unfair labor competition, have been relieved, and in general the measures taken by the United States Employment Service to allocate unskilled labor have been directed as regards mining labor in such a way as to bring about the maximum efficiency. Cooperation with the War Department has also been undertaken, supplying classification of the mining men according to their work as a basis for deferred classification, and cooperating with the War Department and the Man Power Committee of the Department of Labor in seeing that the mining industry is included to maintain maximum production.

As a result of the investigations of the bureau as to the dangers which threaten production of war minerals, Secretary Lane has written to Chairman Kitchen, of the Ways and Means Committee, recommending that the excess profits tax be suspended in the case of those mines producing a war essential until special installations put in for that purpose should be amortized, and this recommendation has been universally approved of by those in possession of the facts.

The platinum situation has been closely studied by the bureau, and, in cooperation with the War Industries Board, plans and regulations have been drawn up which, it is believed, will enable a satisfactory handling of this commodity, and these regulations will be put into effect through the War Industries Board.

MANGANESE AND CHROME IN NEW-FOUNDLAND AND NOVA SCOTIA

In the course of efforts to determine the possibilities of discovering and developing domestic or nearby deposits of chrome and of manganese, Frank H. Probert, mining engineer for the War Minerals Investigation Division of the Bureau of Mines, has just returned from an examination of the manganese and the chrome deposits in Newfoundland and in Nova Scotia.

Mr. Probert reports that as regards Newfoundland there are few harbors or deep waterways open the year round, the greater part of the coast being icebound three or four months of the year. There is only one railroad, which is of narrow-gauge type. The population is sparse and labor is scarce, with few skilled metal miners. The shortage of shipping caused by losses and governmental commandeering is another important factor.

Mr. Probert discusses four manganese deposits on Conception Bay, one on Trinity Bay, and one on Placentia Bay, all in the southeastern part of Newfoundland, but makes the general conclusion that, although large quantities of manganese are present, the thinness of the higher-grade beds, the amount of barren material to be moved per ton of ore obtained, together with the present labor and shipping conditions, militate against production even with the existing urgent need of manganese.

Of three districts having chrome deposits, only one is stated to be worthy of consideration—that at Bluff Head, which, if work is continued, will supply about 600 tons of desirable ore annually.

Nova Scotia is stated to have manganese deposits of exceptional purity in the New Ross district, Lunenburg county. They cannot, however, be considered as a source of manganese ore for war industries. The deposits are small and costly to work, the district is in an isolated section, and the properties are all in bad condition and could not be quickly repaired. The district must be considered solely as a potential source of small quantities of high-grade "chemical" ore.

Examples of Coal Conservation

Large coal saving to supplement the war speeding up of production are reported by the Conservation Bureau of the United States Fuel Administration. The bureau's administrative engineer for Illinois, Joseph Harrington, reports that in Chicago the power and light committee has induced the Chicago Western and Indiana Railroad to close their pumping plant at Forty-eighth Street and the railroad tracks, substituting electric power. This change will reduce coal consumption at this plant 800 tons within the next two months.

The Sanitary District Power Company has been induced to enter into an agreement with the Commonwealth Edison Company by which,

through the substitution of water power, an average of 150 tons of coal a day will be saved.

The city of Chicago will, by using the sanitary district water power at its largest pumping station, be able to save 18,000 tons of coal a year.

Thus in only three specific instances within the city of Chicago the new conservation methods so necessary at the present crisis account for a coal saving of 73,550 tons annually.

WAR INDUSTRIES BOARD ASSUMES CHLORINE CONTROL

Owing to the shortage of chlorine in the United States, the War Industries Board, with the approval of the President, has passed a resolution taking over control of its production. For the present, however, the Board is doing no more than allocate the product, and this is being done under the direction of H. G. Carrell, Chief of the Alkali and Chlorine Section of the War Industries Board.

Chlorine has a wide range of uses, the most important from the present Government point of view being in the manufacture of gas shells and in carbon tetrachloride, which is the basis of one of the most effective smoke screens and also of the best fire extinguishers.

One of the most important commercial uses of chlorine is in the bleaching of paper and various cloth fabrics.

FORMATION HARD TO DETERMINE IN KINGFISHER COUNTY

A geologist of the United States Geological Survey was sent into Kingfisher County, Okla., recently for the purpose of ascertaining whether the rock exposures were adequate as to number and character to enable geologists satisfactorily to determine the dips of the strata and to recognize and define any anticlines or domes that might be present.

The inspection was made to cover a zone across central Kingfisher County, embracing the county seat and a large part of the county, with reconnaissance observational circuits to the south, in the hope that the bedrock exposures would offer adequate criteria or even indications of structure in the region including Kingfisher, the plan being to examine and map in detail at the earliest practicable moment such favorable structures as might be indicated.

The conclusions reached by the geologist were unfavorable as to the plan for further detailed structural studies in the vicinity. They were not unfavorable as to the possible presence of folds, including anticlines and domes, in the region, for such structure may, in fact, be present. The findings were unfavorable only as to the presence of geologic evidence exposed at the surface in sufficient amount and character to enable a geologist satisfactorily to discover and map any structures that might be present over any con-

siderable area, in advance of wildcat boring and the study of the information contained in the well logs. In short, the conditions appear to be unfavorable to satisfactory examinations with a view to recognizing oil or gas structures which will not have been really tested by the drill.

In view of the negative results of the inspection, which concern merely the value of geologic investigations in advance of drilling rather than the question as to the actual presence in the region of structures favorable or unfavorable to the occurrence of oil and gas pools, it is not likely that a report will be prepared for publication.

CENSUS OF COAL TAR INDUSTRIES NOW COMPLETE

The United States Tariff Commission announces the completion of its census of coal-tar products for 1917. This group of products includes not only the coal-tar dyes and the crude and intermediate materials required for their manufacture, but also all the medicinal and photographic chemicals, explosives, synthetic resins, synthetic perfume materials, and flavors which are in any way derived from coal-tar products. There were produced in the United States (not inclusive of explosives and synthetic phenolic resins) 54,367,994 pounds of dyes and other finished products, which have a total value of \$68,711,228. The production of the materials known as intermediates amounted to 322,650,531 pounds, with a value of \$106,942,918.

The annual production was reported for the following groups of products made in whole or in part from materials derived from coal tar: 45,977,245 pounds of dyes, valued at \$57,796,027; 5,092,558 pounds of color lakes, valued at \$2,764,064; 2,236,161 pounds of medicinal chemicals, valued at \$5,560,237; 779,416 pounds of flavors, valued at \$1,862,456; 263,068 pounds of photographic chemicals, valued at \$602,261, and 19,545 pounds of perfume materials, valued at \$125,950.

There were 81 establishments engaged in the manufacture of coal-tar dyes in 1917, and their production during that year was practically identical with the amounts annually imported before the war. The imports for the fiscal year 1914 amounted to 45,840,866 pounds, and the production in the United States in 1917 was 45,977,245 pounds. However, an analysis of this total reveals that the domestic production, though equal in quantity to the preceding imports, differs in the relative amounts of the various classes of dyes. Only a small production was reported for indigo, and the alizarin and vat dyes derived from anthracene and carbazol—classes of dyes which include some of the best and fastest

colors known to the textile trade. The United States produced only 2,166,887 pound of these dyes in 1917, and the elimination of 1,875,787 pounds of extract made from imported indigo reduces the output of these dyes to less than 3 per cent of the pre-war imports. Dyes of this class are dutiable at 30 per cent in the tariff act of 1916. The lack of development in the manufacture of these particular dyes promises to be remedied to a considerable extent in 1918, for a number of firms have begun their manufacture, and a large increase in production can clearly be foreseen.

In the classes of dyes which if imported would be dutiable at 30 per cent plus 5 cents a pound, the American manufacturers have shown remarkable progress, producing 43,810,359 pounds, at a total value of \$57,639,990. That this represents something of an excess over the American needs is evidenced by the fact that during the fiscal year 1917 American-made dyes to the value of \$11,709,287 were exported to other countries. Thus the exports exceeded the pre-war imports in total value, although not in tonnage nor in the variety of the dyes.

The development of the manufacture of intermediates is equally marked, for before the war almost all of these necessary materials were imported from Germany. The Tariff Commission finds that intermediates were manufactured by 117 firms in 1917, and that the production amounted to 322,650,531 pounds, valued at \$106,942,918. These figures, however, are somewhat misleading, as there is inevitable duplication in the totals. It is well known that many of the intermediates are derived from other products of the same class. Thus, starting with benzol, the following succession of products is obtained: Nitrobenzol, anilin, acetanilid, nitroacetanilid, and nitranilin. Each of these products had to be reported by the manufacturer, and hence there has been some cumulative counting.

The totals for all of the coal-tar products will be published in the final report, which may well be expected to offer accurate evidence on the progress of the American dyestuff industry.

Connecticut Saving Fuel

The administrative engineer of the Bureau of Conservation, United States Fuel Administration in Connecticut, reports that those industrial plants which have furnished answers to the fuel saving questionnaire are, in a majority of cases, making the changes suggested in the power-plant recommendations. Eighty plants, consuming for the year ending May 1, 1918, practically 337,000 tons of coal, as a result of the conservation changes suggested, will save at least 15 per cent, or over 50,000 tons of coal annually.

INDUSTRIAL ACCIDENT BOARDS HOLD FIFTH ANNUAL MEETING

The Fifth Annual meeting of the International Association of Industrial Accident Boards and Commissions was held at Madison, Wisconsin, September 24 to 27, 1918, inclusive. This Association is a quasi-official organization made up of officials charged with the duty of administering workmen's compensation laws of the United States and Canada, who meet at least once a year to consider and, so far as possible, agree on (a) ways cutting down accidents; (b) medical, surgical, and hospital treatment for injured workers; (c) means for the reeducation of injured workmen and their restoration to industry; (d) methods of computing industrial accident and sickness insurance costs; (e) practices in administering compensation laws; (f) extensions and improvements in workmen's compensation legislation; and (g) reports and tabulations of industrial accidents and illnesses.

Among the subjects discussed at the conference were:

What is your commission doing to prevent accidents?

How should permanent partial disabilities be compensated?

The need for uniform reports of exposure to accident: Why tabulate non-compensated accidents. The use of standard accident and compensation tables:

Surgical treatment to prevent and minimize permanent disabilities;

How are medical questions handled in your jurisdiction? Compensation in cases of pre-existing disease aggravated by accident.

Selection of the physician under compensation laws; Should medical service be limited? Need of medical statistics for compensation purposes.

Vocational rehabilitation for military cripples; How deal with crippled workers: Conservation and reclamation in the industrial army; Problem of the handicapped man in industry.

The morning of September 25 was devoted to a visit to the office of the Industrial Commission of Wisconsin and the afternoon of the same day, to visits to the Sisholt Plant and other industrial establishments.

Pooling to Be Extended

The Summers Commission, which is headed by L. L. Summers, a member of the War Industries Board, and its technical adviser, is at work in London, planning for the extension of pooling arrangements on other basic elements than tin. The purpose of these arrangements which the War Industries Board is seeking to make, extends to all materials in which there is a shortage, that all users of them may get a supply at a reasonable price.

PERSONALS

Mr. W. J. Armstrong, manager of the crushing and pulverizing sales department of the Jeffrey Manufacturing Company, Columbus, Ohio, has recently received an appointment as captain in the United States Army, and assigned to the Ordnance Department in Washington, D. C.

John C. Howard, of Salt Lake City, Utah, has returned to his home after spending several weeks in Washington and the East in interest of the oil producers of Utah.

J. F. Wellborn, president of the Colorado Fuel and Iron Company, Denver, Colo., was in Washington during the month.

John T. Burns, western secretary of The American Mining Congress, has gone to Los Angeles and San Francisco to assist in the organization of a state chapter for California. Philip Wiseman, Capt. John Barneson, E. A. Montgomery, Fletcher Hamilton, L. C. Gordon, and Albert Burch are members of the organization committee. Mr. Burns will stop at Denver and Salt Lake en route, and will present things of importance to mining men now pending at Washington. He will be at the Washington headquarters again about November 1.

William H. Davis, who has been serving so efficiently in the Revenue Department, has returned to his home in Oklahoma.

B. Britton Gottsberger, manager of the Miami Copper Company, Miami, Ariz., is in the East.

J. F. Callbreath, secretary of The American Mining Congress, attended the Bankers' Convention at Chicago September 23-27.

Charles H. Taylor, of Oklahoma City, Okla., was in Washington during the month.

Col. Thomas A. Ewing, well known to the mining fraternity, died in San Francisco, Cal., on September 18, at the age of 83. Colonel Ewing was born at Lancaster, Ohio, in 1835, and spent the greater part of his life as a contractor, prospector, and miner in the far western states, first crossing the plains in 1859. In the very early days of The American Mining Congress he took an interest in its work and was at one time on its board of directors.



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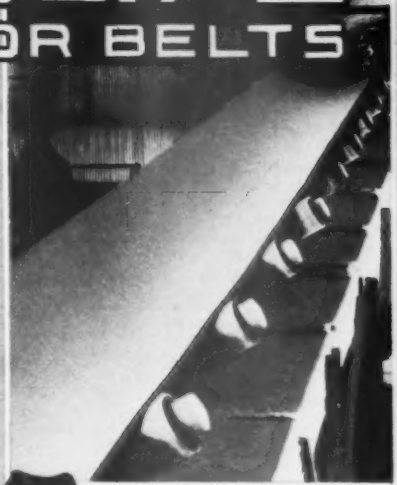
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Indiana Laboratories Co., Hammond, Ind.
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Lucius Pitkin, Inc., 47 Fulton Street, New York City
Pennsylvania Smelting Co., Pittsburgh, Pa.

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American Mine Door Co., Canton, Ohio

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Ainsworth & Sons, Wm., Denver, Colo.

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Chicago Belting Co., Chicago, Ill.
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Goodrich Co., B. F., Akron, Ohio
Jeffrey Mfg. Co., 958 N. Fourth Avenue, Columbus, Ohio

BELTING SUPPLIES

Chicago Belting Co., Chicago, Ill.

BINS (Coke and Coal)

Jeffrey Mfg. Co., Columbus, Ohio

BITS (Machine-Steel)

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BIT SHARPENERS

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Vulcan Iron Works, Wilkes-Barre, Pa.
Wilnot Engineering Co., Hazleton, Pa.

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Jeffrey Mfg. Co., Columbus, Ohio

BUCKETS (Elevator)

Cross Engineering Co., Carbondale, Pa.
Jeffrey Mfg. Co., Columbus, Ohio
Machinery Warehouse & Sales Co., Old Colony Bldg., Chicago.

BUCKETS (Clam Shell)

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CABLEWAYS

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Macomber & Whyte Rope Co., Kenosha, Wis.

CAGES

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Phillips Mine & Mill Supply Co., Pittsburgh, Pa.

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CAR DUMPS

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Machinery Warehouse & Sales Co., Old Colony Bldg., Chicago.
Phillips Mine & Mill Supply Co., Pittsburgh, Pa.

CASTINGS

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The Lunkheimer Co., Cincinnati, Ohio

CHAINS

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Jeffrey Mfg. Co., Columbus, Ohio
Cross Engineering Co., Carbondale, Pa.
Morse Chain Co., Ithaca, N. Y.

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E. J. Longyear Co., Minneapolis, Minn.
Lucius Pitkin, Inc., 47 Fulton Street, New York City
Richards, W. J., Denver, Colo.
Western Chemical Co., Denver, Colo.

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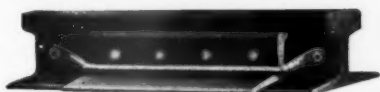
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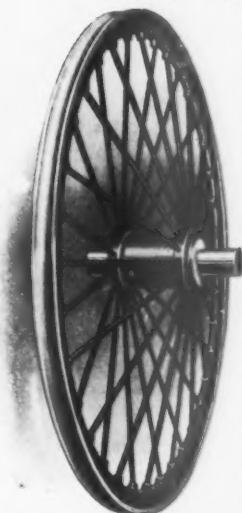
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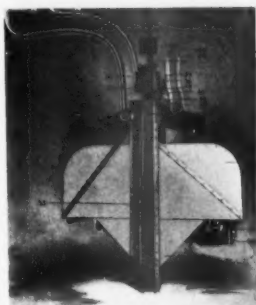
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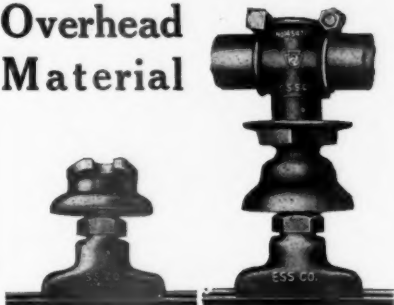
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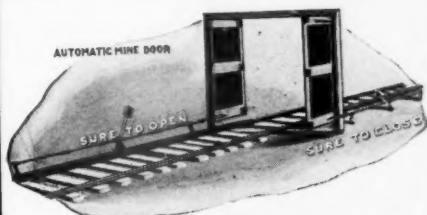
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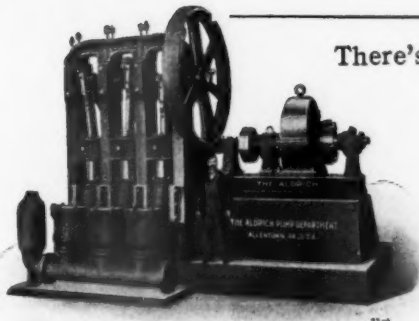
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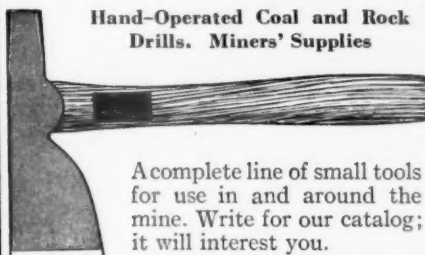
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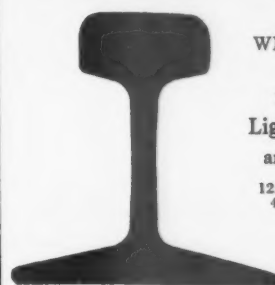


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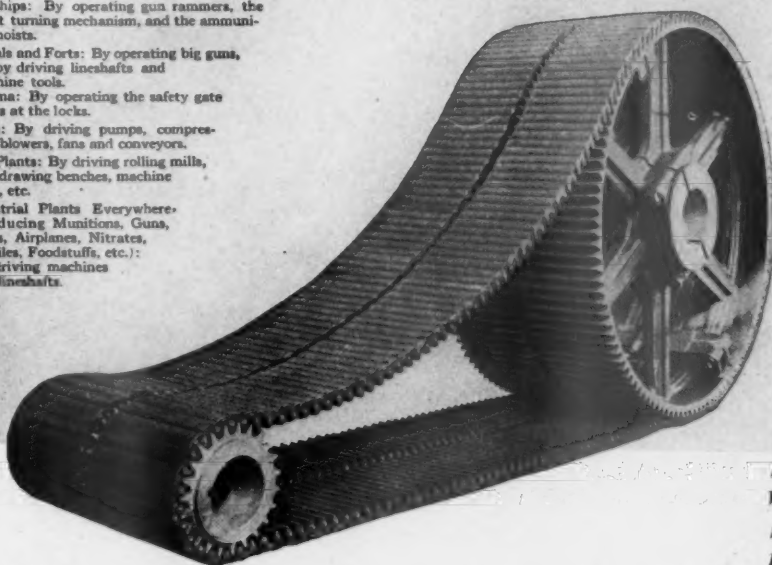


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